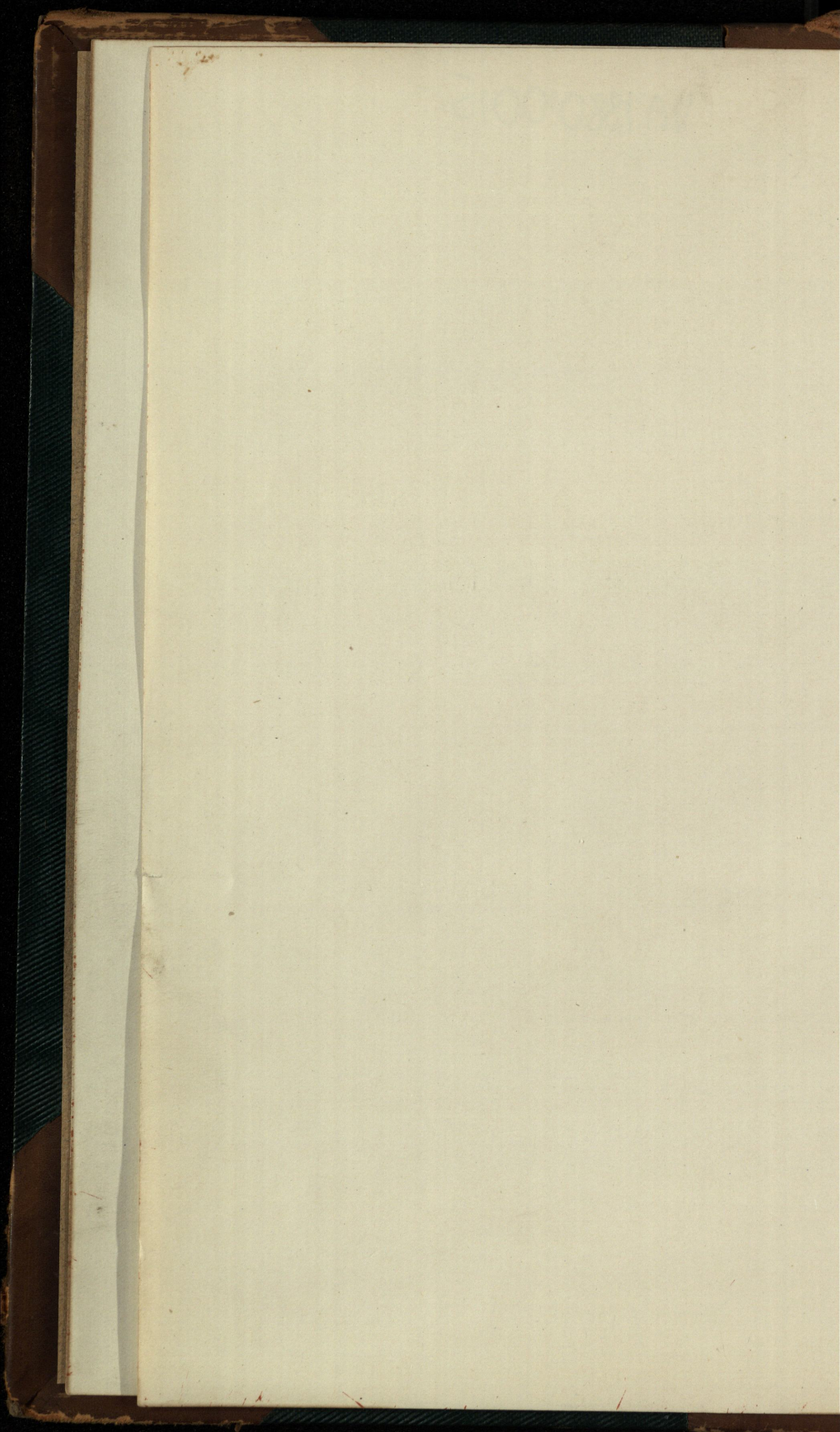


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SOUTH KENSINGTON MUSEUM ART HANDBOOKS.

THE INDUSTRIAL ARTS OF INDIA.

The important collection of examples comprised in the Museum originally formed by the East India Company has lately been transferred from the India Office to the charge of the Lords of the Committee of Council on Education, and will henceforth form a section of the South Kensington Museum.

This Volume, forming one of the series of Art Handbooks issued under the authority of their Lordships, has been prepared at their request, and with the concurrence of the Secretary of State for India in Council, by DR. BIRDWOOD, of the India Office, a gentleman whose wide knowledge of the art manufactures of India specially qualifies him for the work. It is hoped that it will be found useful not alone to visitors to the Museum, but by all who desire to acquire information respecting the arts and industries of the Indian Empire.

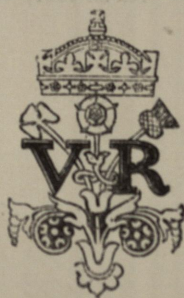
May, 1880.

THE INDUSTRIAL ARTS OF INDIA.

BY

GEORGE C. M. BIRDWOOD, C.S.I., M.D. EDIN.,
Art Referee for the Indian Section of the South Kensington Museum.

WITH MAP AND WOODCUTS.



Published for the Committee of Council on Education

BY

CHAPMAN AND HALL, LIMITED, 193, PICCADILLY.

FESTINA LENTE.

Quhat? gif Art bee slowe: swetelic let yt growe
Als waxeth tendre Gress neath Goddys smale Raine;
Hot of cryngg, stryngg, rorngg, godngg, dryngg,
Waxeth nocht snif Dust y-laft upō ye Plaine . . .

H. LE SCOT, *Canticū filiorū Beseleel*.
[circa MCCCC.]

PREFACE.

PART I, on the Hindu Pantheon, has been compiled chiefly from the well-known works of Belnos, Coleman, Colebrooke, Dowson, Dubois, Fonseca, Garrett, Gladwin, Goldstücker, Herklots, Sir W. Jones, Muir, Max Müller, Ward, Talboys Wheeler, Monier Williams, H. H. Wilson, and J. Wilson, and revised throughout from the *Classical Dictionary of Hindu Mythology* recently published by Professor Dowson, whose spelling of the names of gods and epic heroes of India I have endeavoured to uniformly follow. I have also had to make frequent use of the papers on *Ancient Sculpturings on Rocks*, on *The Snake Symbol in India*, on *Stone Carvings at Mainpura*, and on *Prehistoric Remains in Ancient India*, published in the *Journal of the Royal Asiatic Society* of Bengal, by Mr. J. H. Rivett-Carnac, C.I.E., of the Bengal Civil Service, and of the papers on *The Village named Maruda in Southern Konkana*, on *Serpent Worship in Western India*, on *The Shrine of the River Krishna at Mahabalesvara*, and on *The Shrine of Mahabalesvara*, published in the *Journal of the Bombay Branch of the Royal Asiatic Society* by the Honorable Rao Sahib Vishvanath Narayan Mandlik, member of the Bombay Legislative Council.

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Part II, on The Master Handicrafts of India, is a reprint, with added text, of a portion of my *Handbook to the Indian Court* at the Paris International Exhibition of 1878. It was so well received, both on the Continent and in this country by people interested in the minor arts of India, that I resolved to publish a carefully rewritten edition of it for general sale. I began by adding to it copious notes from the annual *Administration Reports* of the local governments of India; and I had examined all these reports, and all the provincial *Gazetteers* as yet published, when I was asked in the early part of this year to write a popular handbook on the industrial arts of India, in connexion with the reopening of the India Museum under its new administration by the Science and Art Department at South Kensington. In undertaking this task my intention was to write such a short sketch as I have given of the Hindu Pantheon, without some knowledge of which half the interest of the manual arts of India is lost; and to add a few general observations on the artistic character of Indian manufactures. But on examining the India Museum collections in detail, and finding how incomplete they were for a systematic representation of the manufacturing resources of India, I saw that what was most wanted was not a handbook to the contents of the Museum, but an index to its deficiencies; and I therefore resolved to virtually republish a portion of my *Handbook*, with new information, as the second part of the present work. Although its preparation has been hurried—(the Science and Art Department received charge of the Museum only on the 1st of January last)—I hope that it is a fairly trustworthy index of every district and town in British India where manufactures of any special

artistic quality are produced; and I believe it will prove of some assistance to the officials of the Science and Art Department in completing the India Museum collections, and to the general public as a guide to the places in India where they may obtain objects of genuine native art.

I have been much exercised with the spelling of the modern Indian geographical names. I have never before spelled them according to the official system, but have been forced under various compulsions to submit more or less completely to it on the present occasion. I have given up Sir Charles Napier's "Scinde," but I have not been able to give up Moore's "Cashmere." Whoever heard of the vale of "Kashmir"? It has been very confusing to me to give up the old *oo*'s and *ee*'s for the new *u*'s and *i*'s, which latter render it impossible for common English people to understand anything like the true pronunciation of Indian names. It is impossible for English people to pronounce P-u-n-a as Poona, N-i-r-a as Neera, S-h-i-r-p-u-r as Sherepore, or D-a-m-D-a-m as Dum-Dum. Even if the natives of India adopted the Roman alphabet we ought not to spell modern Indian geographical names as they naturally would, if our first object is to preserve the proper pronunciation of them: for let it be clearly understood that by the official system of spelling we are degrading their pronunciation. I saw Kurnool the other day rhymed to skull, simply because the writer of the poem, himself an accomplished Orientalist, had been, in a heedless moment, misled by the official spelling of the word *Karnul*. English is English, and the spelling of English words should be left to be settled by popular English usage, and no attempt should be made to regulate it by arbitrary resolutions of government. When an

Englishman hears a foreign sound he tries to render it as accurately as possible by spelling it out with honest English letters, and for the very reason that he does not adopt a uniform system, but tackles the sound in his own way, he arrives at last at a spelling of it which renders its mispronunciation almost impossible. Calcutta, Madras, Bombay, Lahore, Umritsur, Jullundhur, and Lucknow, are pronounced by Englishmen very nearly as natives of India pronounce Kalikata, Madraj, Bambai, Lahawar, Amritsir, Jalindhar, and Lakhnau. It is of course convenient to have a uniform system of spelling Indian words for the use of international oriental scholars; but the service of oriental science is one thing, and correct English spelling quite another; and what is wanted by Englishmen is not that a dozen or so European "pandits" should run no risk of mistaking Indian names, but that the common people of England, who have a practical interest in pronouncing them correctly should not be led into error. It is therefore of paramount importance that they should "be englished rightly."

G. B.

1 MAY 1880.

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THE INDUSTRIAL ARTS OF INDIA.

PART I.

THE HINDU PANTHEON.

THE arts of India are the illustration of the religious life of the Hindus, as that life was already organised in full perfection under the Code of Manu, B.C. 900-300. Although some of the freshness of its Vedic morning was then already lost, it is life still in its first religious and heroic stage, as we find it painted in the Ramayana and Mahabharata; and we owe its preservation, through the past three thousand years, from change and decay, chiefly to the Code of Manu. The principles of government embodied in this book were probably first reduced to their present form about B.C. 300, as a defence of the priestly polity of the Brahmans against the Buddhist revolution, by which it was threatened from about B.C. 543, the date of the death of Gautama Buddha, to the sixth and seventh centuries of our era. So securely was the sacerdotal state system of the Brahmanical Hindus fixed by the Code of Manu that even the foreign invasions and conquests to which they have been constantly subjected from the seventh century B.C. have left the life and arts of India essentially the same as we find them in the

Ramayana and Mahabharata, and in the writings of the Greek officers of Alexander, Seleucus and the Ptolemies, by which they were first made known to the Western nations.

The intimate absorption of Hindu life in the unseen realities of man's spiritual consciousness is seldom sufficiently acknowledged by Europeans, and indeed cannot be fully comprehended by men whose belief in the supernatural has been destroyed by the prevailing material ideas of modern society. Every thought, word, and deed of the Hindus belongs to the world of the unseen as well as of the seen; and nothing shews this more strikingly than the traditionary arts of India. Everything that is made is for direct religious use, or has some religious significance. The materials of which different articles are fashioned, their weight, and the colours in which they are painted, are fixed by religious rule. An obscurer symbolism than of material and colour is to be traced also in the forms of things, even for the meanest domestic uses. Every detail of Indian decoration, Aryan, or Turanian, has a religious meaning, and the arts of India will never be rightly understood until there are brought to their study not only the sensibility which can appreciate them at first sight, but a familiar acquaintance with the character and subjects of the religious poetry, national legends, and mythological scriptures that have always been their inspiration, and of which they are the perfected imagery.

THE SACRED WRITINGS OF THE HINDUS.

The Hindus arrange their Sastras or sacred writings in four groups, namely,

1. The Vedas, or "divine knowledge."
2. The Upa-Vedas, or "supplementary Vedas."
3. The Ved-Angas, or "members of the Vedas."
4. The Upangas, or "supplementary Angas."

Under these four heads every sort of knowledge is taught.

The Vedas are four also, namely,

1. The Rig-Veda, so called from *rik*, a verse.
2. The Yajur-Veda, so called from *yaj*, worship, relating to sacrifices.
3. The Sama-Veda, so called from *saman*, a prayer arranged for singing.
4. The Atharva-Veda, or Brahmana-Veda, relating chiefly to incantations.

Each Veda is also divided into four parts, namely,

1. The Sanhita, comprising the Mantras and Ganas, or hymns and prayers.
2. The Brahmanas, describing the details of the Vedic ceremonies for the guidance of the Brahmins.
3. The Jnana, or Upanishads, or philosophical part.
4. The Aranyakas, "belonging to the forest," intended for Brahmins in retreat, and closely connected with the Upanishads.

The distinguishing title of Aitareya is prefixed to a Brahmana, an Upanishad, or an Aranyaka of the Rig-Veda. The Sanhitas, Brahmanas, Upanishads, and Aranyakas of the Vedas are designated as *sruti*, or "heard"; and all other Hindu sacred scriptures are simply *smriti*, or "inspired," as distinguished from the "heard" or directly revealed word. The three great schools of Hindu philosophy [Darsana, "demonstration"], and their three supplementary schools, the Nyaya and Vaisesika, the Sankhya and Yoga, and the Purva-Mimansa ["earlier" Mimansa] and Uttara-Mimansa ["later" Mimansa], or Vedanta, all implicitly accept the divine authority of the Vedas, but explain them differently. It was the Brahmins' claiming the direct revelation of the Brahmanas that mainly led to the schism of Buddhism. The Nyaya and Sankhya schools were probably in existence before the time of Gautama Buddha, but the Vedanta [the "end," "object," or

"scope" of the Vedas,] school seems to have arisen in opposition to the teaching of Buddhism, which was popularly regarded as a system of atheism. To it the Vedanta school opposed the doctrine of pantheism. But Vedantism is really nothing else than Nihilism; and the agnostic teaching of the Sankhya school is the common basis of all systems of Hindu philosophy.

Closely connected with the Vedas are the Sutras and Parisishtas. The word *sutra* literally means a "thread" or "string," and the Sutras are little books consisting of a string of short sentences, giving the quintessence of the Vedas in the concisest possible form, for the instruction of students in the accumulated lore of the Vedas. The Parisishtas are of later date, and, as their name indicates are "supplementary" to the Sutras. They are intended not for the instruction of the young, but to convey to the ignorant multitude, in a popular and superficial form, general information regarding their religion. They mark the transition from the Vedic to the Puranic literature of India.

The true Vedic age has been divided by Max Müller into four periods. The first is that of the *Chhandas* ["metre"], which he fixes between B.C. 1200 and B.C. 1000, when the oldest hymns of the Rig-Veda were first composed, and the Vedas had not yet been reduced to their present form. The second or *Mantra* period, he fixes between B.C. 1000 and B.C. 800; and the third or *Brahmana* period, during which the Upanishads also were composed, between B.C. 800 and B.C. 600. The fourth, or *Sutra* period, extends the Vedic age to B.C. 200. In reality the Rig-Veda is the only Veda, since from it almost exclusively the Yajur-Veda and Sama-Veda are derived. Indeed they are merely different arrangements of its hymns for special sacrifices and other rites, and for singing. The Atharva Veda also is sometimes not acknowledged to be a Veda at all, but only a supplement to the others. The last hymn [*sukta*] of the third book [*mandala*] of the Samhita of the Rig-Veda consists of six invocations by the Rishi Viswamitra, one of which is the celebrated

gayatri, or verse of eight syllables, known as "the holiest verse of the Vedas," and "the mother of the Vedas," which it is the duty of every Brahman to repeat at all his devotions. It is a simple invocation to the sun, but to it in the course of ages the most mysterious significance has become attached. It is said in the Code of Manu, ch. vi. v. 71 : "Even as the dross of metals is consumed by fire, so is a man purified of his sins by meditating on the mystic word [OM], and the melodious measure of the *gayatri*." The address to the sun is in these words : "Let us adore the light of the divine sun [*savitri*]. May it enlighten our minds."

The Upa-Vedas are also four, namely,

1. The Ayur-Veda, or science of medicine, derived from the Rig-Veda.
2. The Gandharva-Veda, or science of music, derived from the Sama-Veda.
3. The Dhanur-Veda, or military science, derived from the Yajur-Veda.
4. Silpa, or Sthapatya-Veda, on the mechanical arts and architecture, derived from the Atharva-Veda.

These are all said to belong partly to the *Brahmana* and partly to the *Sutra* period.

The Ved-Angas, or "members of the Vedas," composed during the *Sut* a period are six, namely,

1. The Siksha, on pronunciation.
2. The Chhandas, on prosody and verse.
3. The Vyakarana, on grammar.
4. The Nirukta, in explanation of obscure words and phrases in the Vedas.
5. The Kalpa, on religious ceremonies.
6. The Jyotisha, on astronomy.

The Upangas, or "additional limbs" of the Veda, may also be arranged as six, namely,

1. The Itihasas, or epic poems.
2. The Puranas, or legendary histories.
3. The Yoga, on logic.
4. The Mimansa, on philosophy.
5. The Dharma-Sastras, on jurisprudence.
6. The Tantras, on ritual.

THE ITIHASAS.

The two great Itihasas are the Ramayana, "the adventures of Rama," and the Mahabharata, "the great [war of] Bharata." As compiled works, both are attributed to the latest period of the Vedic age. The compilation of the Ramayana may be fixed not later than B.C. 350, and that of the Mahabharata as late as B.C. 250; and neither, in their present form, can be dated earlier than B.C. 500. The Mahabharata was known to Dion Chrysostom about B.C. 150; and as Megasthenes, who was in India about B.C. 315, does not mention it, Weber places its date between these two epochs. But there can be no doubt that the legends of which both the Ramayana and Mahabharata consist have come down, by tradition, from the earliest period of the Vedic age. There are allusions in the Vedas to the existence of such popular legends; and here and there, even in the Vedas, are to be found ballad stanzas extolling the prowess of some prince of the day, or pious king of old, which Weber has specified as the forerunners of the epic poetry of the Itihasic period. The Ramayana is considered to be the older of the two great poems; but the Mahabharata certainly describes an earlier, or at least a less advanced, condition of Aryan society in India. The Mahabharata is a mythical history of the Aryan colonisation of Hindustan, and the Ramayana of the Hindu conquest of the Dakhan and Ceylon. The special interest of both poems is that, while they embody

authentic legends of the earliest period of the Vedic age, they are, in their present form, productions of the latest period of the true Vedic age. They thus not only afford a complete picture of the patriarchal and heroic stages of Aryan civilisation in India, such as could not be composed from the original Vedas alone, but at the same time lay bare the influences by which it was gradually brought under the religious state system of the Brahmans as organised in the Code of Manu and remaining stereotyped to this day. At every turn the simple legends of the Aryan ballad-makers are strained and distorted until their character is wholly changed, and obviously for the purpose of asserting the supernatural authority of the Brahmans. We see the popular heroes of the Vedic age becoming gods, and the shadowy gods of the Vedas gradually taking the positive forms under which they appear in the Puranas, and have ever since been worshipped. Fortunately there is no great difficulty, so Sanskrit scholars say, in determining what in these epics is heroic history, and what the craftily contrived corruptions of their scheming compilers.

THE MAHABHARATA.

The Mahabharata consists of 220,000 long lines, which are said to have been first collected and arranged together, in eighteen large volumes, by the same person, Krishna Dwaipayana, who is reputed to have been the compiler of the Vedas and earlier Puranas, and is commonly known by the name of Vyasa, or "the fitter together."

The Aryas in India, before they were divided into the castes established by the Code of Manu, are spoken of as belonging to either the Solar Race, *Surya-vansa*, or the Lunar Race, *Chandra-vansa*. The Solar Race, which reigned in Oudh, was the more celebrated, and the Rama of the Ramayana is its great hero. The Mahabharata is the relation of the long feud and final destructive battle between the kindred Kauravas and Pandavas, who were

descended through Bharata from Puru, the ancestor of one branch of the Lunar Race. The other branch was descended from Yadu, and became extinct in Krishna and his elder brother Balarama, who are the real heroes of the Mahabharata. Both Yadavas and Pauravas traced back their common lineage through Yayati, the fifth king of the Lunar Race, and Nahusha, Ayus, and Pururavas, to Budha, the planet Mercury, and Chandra, or Soma, the Moon. Bharata, the son of Dushyanta and Sakuntala, the heroine of Kalidasa's immortal drama of the *Fatal Ring*, was the founder of the kingdom of Bharata, in the Doab between the Ganges [Ganga] and Jumna [Yamuna]. His son was Hastin, who built Hastinapura, the ruins of which are still traceable fifty-nine miles N.E. from Delhi. Hastin's son was Kuru, and Kuru's was Santanu, whose son, by the holy river goddess Ganga, was Bhishma, "the terrible." Bhishma wished to marry the nymph Satyawati, the mother of Vyasa by the Rishi Parasara. The Rishi met her as she was crossing the river Jumna, and their son, who was born on an island [*dwaipa*] in that river, was thence called Dwaipayana. Satyawati's parents objected to her marrying Bhishma, since any son she might bear to him would not necessarily succeed to the throne, to which Bhishma was heir-apparent; and as Santanu wished in his old age to marry again, Bhishma gave her up to his father, and vowed never to marry, or to accept the throne. She bore Santanu two sons, and so became the grandmother of the rival Kauravas and Pandavas. The elder son was killed in battle by a Gandharva king; and when the second also died childless, but leaving two widows, Satyawati called in the sage Vyasa to marry them, and raise up seed to his half-brother. The widows were so shocked at his frightful appearance, caused by his austerities, that the elder one closed her eyes when he came to her, and so gave birth to a blind son, Dhritarashtra, the father of the Kauravas; and the younger turned so pale that her son was called Pandu ["the pale"], the reputed father of the Pandavas. Satyawati desired greatly to have a

grandchild without blemish, and as the widows would not look on Vyasa again, a slave-girl was made to take their place, who became the mother of Vidura. These children were all brought up together by their uncle Bhishma, now regent of the kingdom. When Dhritarashtra became of age, he, being blind, was passed over for the throne, in favour of Pandu; but, when the latter became a leper, Dhritarashtra was made king in his stead. He married Gandhari, and by her had one hundred sons, the Kauravas [so called after their great-grandfather Kuru], the eldest of whom was Duryodhana, the "hard to subdue," and an only daughter, Duh-sala. Pandu married two wives, Pritha or Kunti, the aunt of Krishna, and Madri; but being a leper, he never consorted with either, and their five sons were begotten by others, their parentage being attributed to various deities. Kunti's three sons, Yudhishthira, "firm in battle," Bhima, "the terrible," and Arjuna, "the shining one," were attributed to Dharma, a deified Rishi, the personification of goodness and duty, Vayu, the god of the wind, and Indra, the god of the firmament, respectively; and Madri's twin sons, Nakula, "the mongoose," and Sahadeva, "the creeper," were attributed to the Aswins, or twin sons of Surya, the god of the sun. Pandu acknowledged them all, and they are the Pandavas. Kunti had had another son by Surya before her marriage with Pandu; this son was not acknowledged by Pandu, and in the fatal rivalry between the cousins sided with the Kauravas. He was called Karna, and Kanina ["the bastard"], and his relationship to them was not known to the Pandavas until after his tragical death. The Pandavas on the death of their father were taken to the court of their uncle, the blind Dhritarashtra, who received charge of them and treated them as he treated his sons, with whom they were instructed in the military art by the Brahman Drona. When their education was finished, a grand assault of arms was held to enable the young princes to shew their skill and prowess before the court of Hastinapura; and it was in this contest that the long gathering jealousies of the cousins first broke

into an open quarrel. Shortly afterwards the Kauravas were sent to chastise Drupada, the king of Panchala [Rohilkhand and the Gangetic Doab], an old schoolfellow of Drona's, whom he had mortally offended by repudiating his acquaintance. The Kauravas failing in their attack, the Pandavas marched out to their support, and vanquished Drupada, and brought him back a prisoner to Drona, a feat which only the more incensed the Kauravas against them. Drupada also, burning under his humiliation, prevailed upon two Brahmans to perform a sacrifice, by the efficacy of which he obtained two children, a son, Dhrishta-dyumna, and a daughter, Draupadi, by whom it was promised that he should be revenged on Drona and the Bharata kingdom.

The Pandavas grew so rapidly in favour with Dhritarashtra that at length he appointed Yudhishtira as *yuva-raja* ["little raja"], or heir apparent. The opposition of Duryodhana to this act was so determined that at last the Maharaja was persuaded to exile the Pandavas from Hastinapura; when Yudhishtira and all his brethren and their mother Kunti [Madri had become a *sati* on Pandu's death] took leave of their uncle, and departed into the great jungle toward Varanavata, the modern Allahabad. Their exodus indicates the manner in which the Aryas gradually extended their outposts in India; and their contests with the aborigines, who are stigmatised under the names of Rakshasas and Asuras, "hobgoblins" and "demons," remind the reader of the struggles of the Dutch and English colonists with the Zulus and Caffres in South Africa. While engaged in clearing the Varanavata jungle, the Pandavas heard of king Drupada having proclaimed a *swayamwara*, or tournament, at which his daughter Draupadi would select a husband from among her many suitors. The word *swayamwara* literally means "own choice," but as the lady generally chose the suitor who most distinguished himself in the athletic sports held on the occasion, it came at last to signify a tournament, at which some beautiful damsel became the prize of the victor. So all the Pandavas went to the *swayamwara* of

Draupadi, but disguised as Brahmans, to hide themselves from the Kauravas, whom they knew would be sure to be present.

The bright Arjuna outshone all other competitors in the feats of the arena, and became the selected bridegroom; and great was his joy in Draupadi as she went down to him from her seat, "radiant and graceful as if she had descended from the city of gods." But great was the rage of the assembled Rajas at having been beaten, as they supposed, by a Brahman, and they were appeased only when Krishna made known to them the real position of Arjuna and the Pandavas. On this their uncle recalled them to his court, and divided his kingdom between them and his sons, giving Hastinapura to his sons, and Indraprastha, close to the modern Delhi, to his nephews. It was while they were at Indraprastha that Krishna, who, after his expulsion from Mathura [Muttra], had emigrated to Dwaraka [Dwarka], paid the Pandavas a visit, and went out hunting with them in the Khandava forest, which he and Agni, the god of fire, helped them in burning, against the opposition of Indra, the god of the firmament or rain; and it was on this occasion that Krishna received from Agni the discus and mace, which he bears as his attributes. Afterwards Arjuna went to visit Krishna at Dwaraka, whence, with the connivance of Krishna, he eloped with Subhadra, Krishna's sister, much to the annoyance of Balarama, her elder brother, who wished her to marry Duryodhana, the leader of the Kauravas.

Yudhishtira having subdued all his enemies round about him, and slain Jarasandha, the king of Magadha [Bihar], to avenge Krishna, resolved to perform the *raja-suya* or "royal sacrifice," as a solemn symbol of his supremacy over the tributary kings of Indraprastha, all of whom were required to be present. This more than ever excited the enmity of the Kauravas, who to ruin Yudhishtira invited him to a gambling match in which he lost all he possessed, and all his brothers possessed, and at last gambled away his brothers, and himself, and Draupadi, as slaves to the Kauravas. When Duhsasana dragged Draupadi forward by her

hair, Bhima vowed to drink his blood for the insult ; and when Duryodhana further insulted her by forcing her to sit on his lap, Bhima vowed to break his right thigh-bone. Dhritarashtra insisted on all the Pandavas being freed and their property restored to them ; but again Yudhishtira was tempted by the dice box, the agreement this time being that the winners should obtain the entire kingdom, and the losers go into exile for twelve years in the jungle, and thereafter live concealed for one year more in a city : and again Yudhishtira lost, and with his brothers and Draupadi went forth into the wilds. This is the second exile of the Pandavas. In the jungle Yudhishtira meets his father Dharma, who is personified goodness and duty. He asks his son all sorts of questions about the Brahmans, and Yudhishtira answers him in the true spirit of their rising pretensions. Bhima also meets Hanuman, the monkey ally of Rama, who tells him the whole story of the Ramayana, and afterwards takes him to the gardens of Kuvera, the god of hell and of wealth, in the Himalayas, where he found the flower with a thousand petals, the perfume of which makes the old young and the sorrowing joyful. Arjuna also, by the advice of his mythical grandfather, the Rishi Vyasa, proceeded to the Himalayas, to induce Indra to grant him the celestial weapons which would ensure him victory over the Kauravas. Indra refers him to Siva, whose name is unknown in the Vedas, but whose character is analogous to that of the Vedic god Rudra ["roarer"], the roaring destroying and recreating god of storms, the father of the Maruts. Siva, having been propitiated by the course of severe austerities which Arjuna underwent, gave him one of his most powerful weapons : and then Kuvera, Yama, the judge of the dead, Indra, and Varuna, the oldest of the Vedic gods, the maker and upholder of heaven and earth, and later the god of the ocean, presented themselves to Arjuna as the regents of the four quarters of the universe, the north, south, east, and west, respectively, and furnished him each with his own peculiar weapon ; after which Indra carried him away to the celestial city of

Amaravati, where Arjuna spent many years practising his arms. He was then sent by Indra to fight against the Daityas [Titans], a race of the giants or demons of the later Hindu mythology. It is believed that the old Vedic gods, and beloved national heroes of the Indian Aryas, were associated in this myth with Siva, in order to popularise the latter, and win over the mass of Hindus to the Brahmans in their mortal struggle for supremacy with the Buddhists. Among the authentic incidents of the second exile of the Pandavas may probably be instanced (1) the capture of Duryodhana and Karna by the Gandharvas, a hill tribe, subsequently converted in the Vedas into heavenly beings, and their rescue by the Pandavas; (2) the *raja-suya*, or "royal sacrifice," celebrated by Duryodhana, which, by an obvious gloss of later times, is described as in honour of Vishnu, whose name occurs in the Vedas only as a lesser divinity, the personification of the pervading energy of the sun, but who in the Puranic age became the most popular of the Hindu gods, and is indeed recognised by his special votaries as the supreme god of the Brahmanical triad, Brahma, Siva, and Vishnu; and (3) the attempted abduction of Draupadi by Jayadratha, Raja of the Sindhus, and the husband of Duh-sala.

In the thirteenth year of their exile, the Pandavas entered the service of the Raja of Virata [near the modern Jaipur] in disguise, and assisted him so valorously in fighting Sasarman the Raja of Trigarta [the "three strongholds," the modern Kangra and Jalandhar Doab], and repelling a wanton invasion of the Kauravas, that when the thirteen years of their exile were passed, and the Pandavas declared themselves, Raja Virata gave his daughter Uttara in marriage to Abhimanyu, the son of Arjuna, and resolved to assist the brothers in their attempt to recover their lost kingdom. A great council of the Pandavas and their allies was held at the marriage feast of Abhimanyu and Uttara, at which Krishna regularly moves a resolution, which is duly seconded by Balarama, to the effect that before entering on a war with the Kauravas, in which the latter were sure to be defeated, an

ambassador should be sent to them, to counsel them to restore half the kingdom to the Pandavas. This is opposed by Satyaki, a kinsman of Krishna, and by Raja Drupada, in set speeches in support of an amendment to call their allies to arms at once, and be beforehand with the Kauravas. Krishna replies. He acknowledges that the counsel of Drupada is reasonable, but as regards himself, being equally related to the Kauravas and Pandavas, he must remain neutral, and will return to Dwaraka; adding, "If Duryodhana will consent to a just treaty, well and good, very many lives will be saved. If he will not, then summon your allies to arms, but let your messengers come to me last of all." Then Krishna returned to Dwaraka, and Raja Drupada sent his own priest as an envoy to Hastinapura. Here another council was at once held to receive the Brahman, when it was resolved to send Sanjaya, who was both minister and charioteer to Dhritarashtra, on a return embassy to the Pandavas, accompanied by the family priest of Raja Drupada. Here it is interesting to observe how during the time of the predominance of the Kshatriyas, or Aryan nobility, among the Hindus, the charioteer was always the confidential adviser and friend of his master, and was gradually superseded only by the household priest [*purohita*, literally "man put forward"] or Brahman [*brahman*, literally "prayer"-bearer], who would appear to have originally been the family cook. Sanjaya, in turn, is received in council, and tries to persuade the Pandavas to return to Hastinapura without insisting on any pledge to receive back half the kingdom. But the Pandavas were not to be put off with mere offers of amity and protection, and in the end Sanjaya is respectfully dismissed, with the message to Duryodhana that the five Pandavas will be content with nothing less than the restitution to them of the five districts of Bharata. On his return to Hastinapura, Sanjaya had a secret interview with the Maharaja Dhritarashtra, who spent all the following night in consultation with Vidura, and in the morning called his sons to council, and sent for Sanjaya.

who delivered to them the message from Yudhishtira. They could come to no agreement, and no answer was returned to the Pandavas. Then Yudhishtira applied for advice to Krishna, who offered to go as ambassador to Hastinapura; and this offer being accepted, Krishna selected a prosperous moment, and, having bathed and worshipped Surya and Agni, went his way to Hastinapura. He sent forward a messenger to announce his approach, and Vidura advised that a deputation of the chieftains should go forth to meet him, but Duryodhana objected. On entering the city Krishna was received by all the Kauravas except Duryodhana, and took up his lodging in the house of his aunt Kunti, the mother of the Pandavas. The Brahmans of Hastinapura paid the highest honours to him; and it is evident that the compilers of the Mahabharata intend here to represent Krishna as an incarnation of Vishnu. When he proceeds to council, Narada the Rishi, to whom so many of the Vedic hymns are ascribed, and one of the attendants of the throne of Brahma, and the other Rishis, appear in the heavens to meet him, and take their seats beside him. Krishna counsels peace, and appeals strongly to the Maharaja to be just to the Pandavas. The Maharaja entreats him to use his influence with Duryodhana: "He refuses to listen to his mother Gandhari, or to the pious Vidura, or to the wise Bhishma, and if you can move my wicked son, you will be acting like a true friend, and I shall be greatly obliged." Then Krishna reasons with Duryodhana, and Bhishma and Drona and Vidura remonstrate with him. He only becomes more exasperated, and, being encouraged by the evil advice of Duhsasana, abruptly leaves the assembly. Gandhari brings him back and rebukes him before the council, but he again leaves it accompanied by Duhsasana, Karna, and Sakuni. Then Krishna revealed his divinity. All the gods issued from his body at once, and flames of fire from all his members, and the rays of the sun shone forth from the pores of his skin: and all the assembly closed their eyes, and there was an earthquake,

and great fear fell on all. Then in a moment Krishna re-assumed his humanity, and took leave courteously of the Maharaja, saying, "I forgive you, but when the son is bad, the people will curse the father also." The whole of this legend of Krishna is admitted to be a Brahmanical interpolation, and marks a stage in the development of the Krishna of the Kshatriya ballads into a manifestation of Vishnu.

There was nothing to be done now but prepare for the great battle. The Kauravas entrenched themselves in the plain of Kurukshetra, *i.e.* "the field of the Kurus," the plain between the Saraswati and Jamna, where are Taneshwar and Panipat, and elected Bhishma their commander. The Pandavas elected Dhrishtadyumna to command them; and falling into their ranks, with flags flying and drums beating, marched forth to meet the Kauravas. They halted beside a lake which lay between them and the Kauravas, and on the other side they dug a great trench. They appointed also signs and watchwords, so that at night-time every one might pass in safety to his own quarters, and the guards be ever on the alert. For a day or two challenges were interchanged, in very abusive language, between the two camps. Then certain rules were agreed to on both sides, of the nature of a Geneva convention, for mitigating the horrors of the coming battle. There was to be no stratagem or treachery, but fair stand-up fighting; there was to be a perfect truce between the combats; fugitives, suppliants, drummers, and chariot-drivers were to be treated as non-combatants; no combat was to take place without warning, or between unequals; no third warrior was to intervene between two combatants; and no fighting was to take place during the preliminary abusive challenges. In the battle which followed, which represents a real event in the early history of the Aryas in India, the combatants utterly disregarded these rules, which are clearly of subsequent Brahmanical origin. The dissertation on the geography of the world with which the charioteer Sanjaya entertains his royal master on the eve of the battle is

another Brahmanical interpolation ; as is also the dialogue held before both armies on the morning of the first day of the battle, between Arjuna and Krishna, who acted as Arjuna's charioteer. It is known as the Bhagavad-Gita, or "song of the divine one," that is Krishna, and, with the Bhagavata Purana, is the text-book of the Puranic worship of Krishna as Vishnu. It is a protest against war, but the conclusion reached is that when fighting becomes a duty we must enter on it valiantly, without heed to the sin of slaughtering others. The battle lasted eighteen days. On the second day the King of Magadha [Bihar] and his two sons are slain by Bhishma. The third day is distinguished by a tremendous charge of the Pandavas in half-moon formation. On the tenth day, Bhishma is wounded in single combat with Arjuna, when the command devolved on Drona. On the thirteenth day Drona draws up the Kauravas in the form of a spider's web ; into which the youthful Abhimanyu drives his chariot, and is overpowered by six of the Kauravas and slain. On the fourteenth day Arjuna slays Jayadratha, and the battle rages all through the following night by torchlight. On the fifteenth day, Dhrishtadyumna slays Drona, who is succeeded in the command of the Kauravas by Karna. On the seventeenth day Bhima slays Duhsasana. After stunning him with a blow of his mace, he caught him up by the waist, and whirled him round and round his head, and then dashed him to the ground, shouting : "This day I fulfil my vow against the man who insulted Draupadi." Then he cut off his head, and holding his two hands to catch the blood he drank it off, crying out, "Haha ! never did I drink of anything so sweet before." On the same day Arjuna slays Karna, who is succeeded as commander of the Kauravas by Salya, who was slain on the eighteenth and last day of the battle by Yudhishtira, when the utter defeat of the Kauravas followed. Duryodhana concealed himself in the lake which separated the two camps, but was soon discovered and forced to come out and engage in single combat with Bhima. The latter, after a desperate encounter, smashed

Duryodhana's right thigh-bone, as he had vowed to do for the insult offered to Draupadi thirteen years before; and when Duryodhana fell, he kicked him on the head, and left him for dead. This foul action so greatly excited the wrath of Yudhishtira, that after the battle Bhima fell at the feet of his eldest brother and wept and implored pardon for his sin. Then Krishna sounded his shell with all his might, and proclaimed the reign of Raja Yudhishtira; and all the people who were present rejoiced greatly, and filled the air with acclamations of "Long life to the Raja Yudhishtira!"

The Pandavas proceeded at once to the camp of the Kauravas and obtained a great spoil. Then they went on to Hastinapura, where the most affecting interviews took place between them and the Maharaja Dhritarashtra and his queen Gandhari. Meanwhile Aswatthama, the son of Drona, had entered the Pandavas' camp by treachery, and slain the Pandavas' five sons. He took their five heads to Duryodhana and offered them to him as the five heads of the Pandavas themselves. Duryodhana in the twilight was unable to distinguish them, but he rejoiced greatly, and asked that the head of Bhima might be placed in his hands. With dying energy he pressed it with all his might, but when he found that it crushed within his grasp, he knew that it was not the head of Bhima, and reproached Aswatthama bitterly for slaying harmless youths, saying with his last breath: "My enmity was against the Pandavas, not against these dear innocents." Draupadi prayed for revenge on Aswatthama, but Yudhishtira represented that he was the son of a Brahman, and that his punishment must be left to Vishnu. The burning of the bodies of the dead Rajas followed, and it is noteworthy that there is no reference in this account to the *sati*, or later Hindu custom of widows immolating themselves on the funeral pyre of their husbands, nor do any Brahmans appear to have officiated on the occasion. The Kauravas having died fighting bravely, their spirits ascended to the heaven of Indra.

After the burning of the slain, Yudhishtira with his brethren

entered Hastinapura in triumph, and was installed as Raja, in the room of Duryodhana, under the nominal sovereignty of Dhritarashtra.

When he was firmly established in the kingdom, he resolved to celebrate the great sacrifice known as the *aswamedha*, or "sacrifice of a horse". It was an assertion of a Raja's pretension to supremacy over the whole world. A horse of a particular colour was procured, and let loose to wander a year at its will. Its entrance into any foreign kingdom was virtually a challenge to its Raja, either to submit to the supremacy of the Raja to whom the horse belonged, or to offer him battle. Moreover, a Raja who thus began an *aswamedha*, and failed to secure the restoration of his horse, became disgraced in the eyes of his subjects and neighbours. If, on the contrary, he succeeded in forcing the submission of the Rajas into whose territories his horse successively strayed, and thus at the end of the year brought it back triumphantly again to his own city, the animal would be sacrificed to the gods in the presence of all the Rajas who had become tributary, and the *aswamedha* would be closed by a grand feast, at which the roasted flesh of the horse would be eaten as an Imperial dish.¹ The rite has long since disappeared from Indian life, but the mythical character attributed to it in the Mahabharata shows the deep impression made by it three thousand years ago on the minds of the Hindus, who naturally in time came to associate it with the earlier fables of the passage of the sun through the heavens. The twelve adventures of the horse which Yudhishtira loosed are twelve legends connected with the countries over which the sun is supposed to shine in his annual course. Arjuna followed the horse, and at the end of the year returned in triumph with it and the conquered Rajas to Hastinapura. The concluding ceremonies of the great function were altogether seventeen, of which the chief were the offering of the *homa* [*Sarcostemma viminalis*] and the sacrifice of the horse, that is, the roasting of the

¹ *The History of India*, Talboys Wheeler, vol. i. p. 378.

horse, and the brewing of the intoxicating liquor for the feast, the real significance of which was not religious but political.

The *aswamedha* of Yudhishthira is followed in rapid succession by the retributive tragedies which close the story of the Mahabharata. Dissensions arise between Bhima and the old blind Maharaja, who cannot forget the cruel deaths of his son at the hands of Bhima. At last, with his heart-broken queen Gandhari, and Kunti, his brother's widow, and the saintly Vidura, he retires into a jungle on the banks of the Ganges. Here, to console him, Vyasa raises up out of the river the ghosts of those who were slain in the great battle of Bharata. They appear all in their pomp as when they lived : and the Brahman compilers of the Mahabharata illustrate a deep truth of human nature when they describe the dead Kauravas as meeting the living Pandavas in perfect friendship : "for all enmity had departed from among them, and each went forward preceded by his bards and eulogists, who sang the praises of the noble dead." Thus the night passed away in fulness of joy between the dead and the living : and when the morning dawned, the dead all mounted their chariots and horses again and disappeared into the sacred Ganges. Shortly after this the jungle to which Dhritarashtra had retired was consumed by a fire, in which the old king and his queen, and Kunti, and all who were with him, perished. The Pandavas were smitten with supernatural remorse and horror at the event, and ever deepening darkness fell on them for the rest of their days. Fearful omens followed. Every one felt that something terrible was impending, but no one knew how and when it would happen. It came to pass in the destruction of Dwaraka, the capital of Krishna's kingdom of Gujarat, by an earthquake. The apparitions which are said to have appeared to its inhabitants are evidently the visions of *delirium tremens*, following the abuse of wine, which was the besetting sin of this city. The chieftains are described as constantly indulging in wine parties, and insulting the Brahmans. Suddenly the *chakra* or disc of Krishna was caught up to heaven ; and the

ensigns of Krishna and Balarama, the palmyra-tree of Balarama, and the bird Garuda of Krishna, separated themselves from the standards on which they were figured, and disappeared in the heavens. The Apsarases, the nymphs of Indra's heaven, appeared in the sky, and cried out to the people, "Arise and be ye gone!" In a tumult created by a drunken Yadava with the Brahmans, all the Yadavas were slaughtered by one another, and the sons and grandsons of Krishna were among the slaughtered. Balarama had already taken flight, and died of exhaustion in the jungle, where Krishna, who followed him, was accidentally slain while resting against a tree, by a hunter named Jara, who mistook him for a deer. Hearing of his death, Arjuna proceeded to Dwaraka, and performed his funeral rites and those of his father Vasudeva and all the Yadavas who had been slain. The residue of the race he gathered together to take back with him to Bharata; and scarcely had they left the city when the sea arose in a great heap, and overwhelmed it, and all who remained in it. On his return march, Arjuna's caravan was attacked by robbers; and when he reached the plain of Kurukshetra, five of Krishna's widows burnt themselves on a funeral pile, while the remaining widows became devotees, and retired into the jungle. When Yudhishtira heard from Arjuna all that had happened in Dwaraka to the Yadavas, he also resolved to give up the concerns of this world. He divided the kingdom of Bharata between the grandson of Arjuna and the only surviving son of Dhritarashtra, and, enjoining them to live in peace and amity with each other, he took off all his jewels and royal raiment, and clothed himself in vestments made of the bark of trees; and he and his four brothers threw the fire of their domestic cookery and sacrifices into the Ganges, and went forth with Draupadi from the city of Hastinapura, followed only by their dog. First walked Yudhishtira, then Bhima, then Arjuna, then Nakula, then Sahadeva, then Draupadi, and last their dog; and they went through all Banga [Bengal] toward the rising sun, until they reached the everlasting rampart of the

Himalayas, and Mount Meru, the highest heaven of Indra. But it did not fall to all of them to enter in their bodies of flesh into the heavenly city. Their sins and moral defects prevented them, First by the wayside fell and perished Draupadi, "too great was her love for Arjuna"; next Sahadeva, "he esteemed none equal to himself"; then Nakula, "he esteemed none equal in beauty to himself"; then Arjuna, "for he boasted, 'In one day could I destroy all my enemies, and fulfilled it not'"; then Bhima, "because when his foe fell, he cursed him." Thus Yudhishtira went on alone, his dog following him, and as he went, Indra appeared to him, and invited him to enter his heaven. But Yudhishtira refused to enter unless assured that Draupadi and his brethren would be received also, saying, "Not even into this heaven would I enter without them." He is assured that they are there already, and is again asked to enter, "wearing his body of flesh," but refuses, unless his faithful dog may also bear him company. Being admitted with his dog, he, by the effect of *maya* or illusion, does not at first find Draupadi and his brothers there, and refuses therefore to remain, and insists on joining them in hell, where they are made to appear to him undergoing horrible tortures. Far rather would he suffer with his dear friends of earth in hell than enjoy one moment of heaven apart from them. Having thus endured the last test of the true humanity of his soul, the whole scene of cruel deception vanishes, and he, with Draupadi and his brothers, and all the Pandavas, dwell for ever with Indra in joy unspeakable.

Thus closes the history of the fratricidal struggle of the Pandavas and Kauravas. It is impossible to give any account of the exhaustless legends of Krishna, the Hindu women's darling god, apart from his connexion with the main action of the Mahabharata; or of the separate episodes of Nala and Damayanti, Devayani and Yayati, and Chandrahassa and Bikya, three exquisite pictures of Hindu life, illustrating, respectively, faithfulness in love, marital infidelity, and the fickleness of fortune. "The reading of the Mahabharata," say the Hindus, "destroys all sin . . .

so much so that a single *sloka* [distich or couplet] is sufficient to wipe away all guilt. This Mahabharata contains the history of the gods of the Rishis [*i.e.* Vedic gods] It contains also the life and actions of the one god, holy, immutable, and true, who is Krishna As butter to all other food, as Brahmins to all other men . . . as *amrita* to all other panaceas, as the ocean to a pool of water, as the cow to all other quadrupeds, so is the Mahabharata to all other histories. . . . It is called Mahabharata because once upon a time the gods placed the Mahabharata on one scale, and the Vedas on the other, and because the Mahabharata weighed heavier, it was called by that name, which signifies the greater weight."

THE RAMAYANA.

The Ramayana consists of 96,000 lines, and is divided into seven books, and its author, or compiler, was Valmiki, who is represented as taking part in some of its scenes. It illustrates a far more advanced state of Aryan civilisation in India than the Mahabharata. It refers to a time when the empire of the Aryas, having been firmly established in Bharata [Delhi], Kosala [Oudh], Magadha [Bihar], Mithila [Tirhut], and throughout Hindustan, had advanced to the conquest of the Dakhan and Lanka [Ceylon]; and the epic character of the poem is more perfectly elaborated than in the Mahabharata. It is evidently founded on fact, for all the traditions of Southern India ascribe its subjugation and the dispersion of the wild aboriginal tribes to Rama, the conqueror of Lanka, who is the first real Kshatriya hero of the later Vedic age. Rama Chandra, the hero of Valmiki's epic, probably represents in himself two distinct historical Ramas, an earlier, who ruled in great glory at Ayodhya, and a later, who upheld the Brahmins against the Buddhists, and enabled them to establish the *linga* worship throughout the Dakhan. He is, in fact, the Rama of an ancient Aryan tradition, who is condemned to exile

through the jealousy of his stepmother, and ultimately restored to the throne of his ancestors, coalesced with a Rama, the protector of the Brahmans of the Dakhan against the Buddhists; for it is certain that the Buddhists were driven out of the Dakhan by the worshippers of Siva, and compelled to take refuge in Ceylon :¹ nor is the presumption inconsistent with the deification of the hero of the Ramayana as a manifestation of Vishnu. Its story, as compiled by Valmiki, covers the whole period of the rise and triumph of Buddhism, and of the first reaction of the Brahmans against it: and as in the Mahabharata the Brahmans sought to enlist the popular sympathies in their favour by representing their god Vishnu as identical with the Kshatriya hero Krishna, so in the Ramayana Vishnu is represented as identical with Rama also: and Vishnu is worshipped all over India to this day either as Krishna or Rama; while the worship of Rama prevails particularly in Oudh and Bihar. There are three Ramas in Hindu mythology, all of whom are represented as avatars or incarnations of Vishnu, namely: (1) Parasu-Rama, literally "Rama with the axe," who is known also as "the First Rama," the impersonation of Brahmanism militant against the Kshatriyas, and is the sixth avatar of Vishnu; (2) Bala-Rama, the "boy-Rama," or Halayudha-Rama, *i.e.* "Rama with the plough," Krishna's elder brother, who takes Krishna's place as the eighth avatar of Vishnu, when Krishna is regarded as absolutely identical with Vishnu himself; and (3) Rama Chandra, the "moon-like" or "gentle Rama," known also as "Rama with the bow" [*i.e.* the crescent moon], the seventh avatar of Vishnu. He is the great hero of the Aryan Solar Race, or *Surya-Vansa*, which sprang from Ikshwaku, the son of the Manu Vaivaswata, the son of Surya, the sun: and typifies the conquering Kshatriyas advancing from Hindustan into the Dakhan, and subduing the barbarous aborigines, and again the secular leader of the Brahmanical priesthood, expelling the Buddhists. He belonged to the dynasty of

¹ Talboys Wheeler, *History of India*, vol. ii. pp. 233, 224.

the Solar Race which reigned at Ayodhya, the modern Oudh, and was the son of King Dasaratha : and the Ramayana is the story of the loves of Rama Chandra with Sita ; of her abduction by Ravana, the demon king of Lanka or Ceylon ; and of her recovery by Rama, with the aid of the monkey chief, Hanuman, and their triumphant return to Ayodhya.

The opening scene is laid at Ayodhya, which is described like Indra-prastha, but in far greater detail, as an ideal Hindu city and state. The king Dasaratha had three queens, Kausalya, Kaikeyi, and Sumitra, but no son ; and notwithstanding that beside these he took unto himself seven hundred and fifty other women, not one of them bore to him a son. Then he resolved to perform an *aswamedha*, or sacrifice of a horse, and so propitiate the gods to give him a son. A horse was let loose for an entire year, and then brought back ; the sacrificial pits were dug in lines, in the form of the bird Garuda, the vehicle of Vishnu, and the fires kindled ; and while hymns were chanted from the Sama Veda the horse was slain, and its carcass laid upon the fires ; and the three queens were placed beside the carcass of the horse, the nearest to it being Kausalya. The Rishi Sringa performed also the *homa* sacrifice for obtaining sons for the Maharaja Dasaratha. While the sage was sacrificing, Vishnu appeared to him out of the fire with a golden vessel filled with the divine *payasa* [ambrosia], saying, "O sage, do you receive this vessel of *payasa* from me and present it to the Maharaja." The Rishi replied, "Be pleased yourself to deliver this vessel to the Maharaja." Then Vishnu said to Dasaratha, "O Maharaja, I present to you this *payasa*, the fruit of sacrifice . . . let it be eaten by your beautiful queens." Dasaratha gave half of the *payasa* to Kausalya, and half between Kaikeyi and Sumitra ; and in due time they bore to him four sons ; Kausalya bore Rama, Kaikeyi bore Bharata, and Sumitra bore Lakshmana and Satrugna. Rama partook of half the nature of Vishnu, and Bharata of a quarter, and Lakshmana and

Satrughna each of an eighth; and throughout their lives all the brothers lived in unbroken friendship, but Lakshmana devoted himself particularly to Rama, and Satrughna to Bharata. Vishnu had promised the gods to become incarnate in order to destroy Ravana, the demon king of Lanka, and in this manner chose Dasaratha for his human parent. Every section of the Ramayana is invaluable for the student of the art history of India, but it is impossible to enter here into these details. In the first section the boyhood of Rama is described with the most interesting minuteness; how he began to speak by saying "Pa" and "Ma," and calling himself "Ama," "because he could not yet pronounce the letter R"; his first attempts at walking; his dresses, his toys; and how he cried for the moon, refusing to be comforted, until Sumantra, the chief minister of the king, brought in a looking-glass, and gave it to Rama to hold up to the moon, and so placed the moon in his hands.¹ We are next told of the piercing of his ears in his third year, of the rites of his initiation in his fifth year, of his investiture with the sacred cord in his eleventh year, and of his youthful sports. One day when shooting with a bow that belonged to a companion he bent it so forcibly that it broke in two, on which his companion said to him: "You are strong enough to break my bow, but if you would really show your strength, you should go to the city of Mithila and bend the great bow of the god Siva, which is kept there by the Raja Janaka The Raja has vowed to give his lovely daughter Sita in marriage to the man who can bend the great bow of Siva." Rama pondered much on this in his heart, and when, after destroying the Rakshasas who infested the outskirts of Kosala, the destined time had come, he set out with his brother Lakshmana and the sage Viswamitra for Mithila. When the Raja Janaka saw them approaching, he asked: "Who are these

¹ In the French nursery rhymes the child cries for the moon, which is brought down to him by its reflexion in a bucket of water, into which he is incontinently tipped head foremost.

two youths, bright and beautiful as the immortal Aswins?" and Viswamitra replied: "They are the sons of the Maharaja Dasaratha, the conquerors of the Rakshasas, and are come to try and bend the great bow of Siva." Then Rama, smiling, bent the bow until it broke, and obtained the hand of Sita; who was so named from *sita*, a furrow, because she sprang out of the ground before her father's ploughshare while he was ploughing a field. Lakshmana was married to her sister Urmila, and Bharata and Satrugbha, who came with their father to Mithila to attend the espousals, were married to the two nieces of Janaka. On their way back to Ayodhya, they were met by the terrible apparition of Parasu-Rama, the Brahman destroyer of the Kshatriyas. When Vasishtha and the other sages saw him, they cried out: "Will the great Rama again destroy the Kshatriyas?" But Parasu-Rama turned to Rama Chandra, saying: "You have broken the divine bow of Siva, but I have another bow which Vishnu gave to me, and with it I have conquered the whole world. Take it, and if you can bend it, I will give you battle." The heroic Rama, smiling, drew it, and discharged the arrow into the sky, saying to Parasu-Rama, "As you are a Brahman I will not discharge it at you". Then Parasu-Rama knew that Rama Chandra was Vishnu, and fell down and worshipped him.

Rama's honeymoon being passed, his father resolved to crown his son's happiness by formally recognising him as *yuva-raja* ["little raja"] or heir-apparent. Then at once the palace intrigues, with which all who know the life of Indian courts are so familiar, begin, and do the work of the avenging Nemesis, which ever, in the conception of the ancient world, attends on human felicity. Kaikeyi, Dasaratha's second and favorite queen, had always been kind to Rama, but a spiteful female servant now began working on her feelings, and roused her jealousy on behalf of her own son Bharata against him; and thus it came about that after a long struggle Dasaratha was prevailed upon at the last moment to proclaim Bharata as *yuva-raja* instead of Rama, for

whose installation every preparation had been made ; and Rama was ordered into exile. So Rama, with Sita and Lakshmana, bade farewell to the Maharaja and the three queens, and departed into the forests amid the lamentations of the whole city of Ayodhya. They passed through Sringavera, the modern Sungrur, and Prayaga, the modern Allahabad, a sacred Brahman town at the junction of the Ganges and Jumna, where they rested at the hermitage of Bharadwaja, the father of old Drona in the Mahabharata ; and then came to Chitra-Kuta, a celebrated hill, south of the Jumna, in Bandelkhand, where was the hermitage of the sage and bard Valmiki, the author or compiler of the Ramayana. From Chitra-Kuta, Rama sent back his charioteer to Ayodhya, and the people of the city, seeing him return without Rama, again filled the air with their lamentations. Dasaratha was distracted by his grief, and, while imploring forgiveness of Kausalya, the mother of Rama, fell back and died in her arms. Messengers were at once sent off to Bharata, who was absent, to return and assume the sovereign authority, but he refused, and, heaping bitter reproaches on Kaikeyi, his mother, declared his loyal attachment to Rama as his king, and comforted Kausalya on the prospect of her son's speedy return to Ayodhya. After the funeral rites of Dasaratha had been duly performed (they are described with the utmost minuteness), Bharata called the great council, to which he announced his intention of visiting Rama for the purpose of installing him as king ; and at once set off for Chitra-Kuta. Rama declined to assume the Raj, until the term of his father's sentence of banishment against him was fulfilled. Bharata as firmly refused to ascend the throne ; and at length it was arranged that Bharata should return to Ayodhya as Rama's vicerent. The ten following years of his exile were passed by Rama and Sita and Lakshmana in going from one hermitage to another. In this way they visited the sage Atri, near the forest of Dandaka, the sage Sarabhanga, who sacrificed himself on a funeral pile, the sage Satikshna at Ramtek near Nagpur, and the sage Agastya,

at his celebrated hermitage in Mount Kunjara, to the south of the Vindhya Mountains. Agastya received them with the greatest honour, and presented Rama with the bow of Vishnu. The neighbourhood was infested by Rakshasas, and a Rakshasi named Surpa-nakha, the sister of Ravana, seeing Rama, fell in love with him. He referred her to Lakshmana, who sent her back again to Rama, which so infuriated her that she first fell upon Sita, in defending whom Lakshmana cut off the Rakshasi's nose and ears. The mutilated Surpa-nakha then incited her two brothers Khara and Dushana to attack Rama and Lakshmana, and at last tempted her brother Ravana [the demon king of Lanka, the conqueror of Vasuki, the Naga king of Patala, and of Kuvera, the god of hell and wealth], to carry off Sita. Ravana came from Lanka in an aerial chariot, and, luring Rama from his house, approached Sita in the form of a religious mendicant, and thus found the opportunity for seizing and flying off with her. Rama and Lakshmana searched for her everywhere, but could not find her; when at length they came upon Jatayus, the king of the Vultures, and son of Vishnu's bird Garuda, lying prostrate on the ground. He had seen Ravana carrying off Sita, and had tried to prevent him, and been beaten back mortally wounded, and was able only to say: "O Rama, the wicked Ravana, the Raja of the Rakshasas, has carried away Sita toward the south." The mighty chief of the Vultures then looked up into the face of Rama, and his eyes became fixed, and he died. At the same moment the clouds opened, and a chariot of fire descended from Vaikuntha, which is the heaven of Vishnu, with four attendants therein; one carried the conch-shell, another the discus, the third the mace, and the fourth the lotus, which are the four ensigns of Vishnu; and as the soul of Jatayus arose from his dead body, the four celestial messengers caught it up with them into the heavens and it became absorbed in Vishnu. Then Rama and Lakshmana proceeded into the Dakhan [or "south country"], and on their way killed the monstrous Rakshasa Kabandha, who was

once a divine Gandharva; and as his spirit, which was that of a heavenly minstrel, issued forth from his body, it advised Rama and Lakshmana to seek the aid of Sugriva, the king of the monkeys, or literally, woodsmen, the same Sanskrit word, *bandar*, meaning a monkey or a forester. He had been dethroned by his brother Bali or Balin; and Rama overcame Balin, and reinstated Sugriva as king at Kishkindya; and in return Sugriva and his general Hanuman became the allies of Rama in his war against Ravana. Their armies passed over by "Rama's bridge" into Ceylon, and there, after many battles, the city of Lanka was taken, and Ravana slain, and Sita recovered. Rama was filled with joy at seeing Sita again, but, jealous for her honour, refused to take her back until her innocence had been proved by the ordeal of fire. She entered the flames in the presence of men and gods, and Agni, the god of fire, led her forth, and placed her in Rama's arms unhurt. Then Rama, with Sita, and Lakshmana, and all his allies, returned in triumph to Ayodhya, and was solemnly crowned Maharaja, and began a glorious reign, Lakshmana being associated with him in the government. Thus ends the sixth section of the Ramayana in perfect happiness and peace; and the seventh section, which concludes it, the *uttara-kanda*, is really a later section, and is justly held by the Hindus as too painful for contemplation. From it we learn that Rama continued to feel jealous on account of Sita's abduction by Ravana. One day it happened that Sita, in talking to her handmaids about her captivity in Lanka, had drawn a figure of Ravana on the floor of her room, and Rama, seeing it, and not knowing why it had been drawn, flew into a rage against Sita, and determined to put her away. She was sent off to the hermitage of Valmiki. There she gave birth to her two sons, Lava and Kura. As they grew up, they distinguished themselves greatly by their valour, and were recognised by Hanuman as the sons of Rama, and then by Rama himself, just as he is about to give them battle for seizing a horse he had let loose for an

aswamedha, undertaken in expiation of his sin for slaying Ravana, who, though a demon, was still a Brahman. Valmiki, on discovering who he was, went back for Sita, and, taking her by the hand, led her to Rama, and gave her into his hands, saying: "Your sons have revenged on Rama all the evil he has done you." And then they all returned together to the city of Ayodhya, and performed the *aswamedha*, and passed the rest of their days in happiness without end. In the *Adhyatma Ramayana*, a part of one of the *Puranas*, the boys wander accidentally into Ayodhya, and are there recognised by their father, who at once acknowledged them, and recalled Sita to attest her innocence. She returned, and in public assembly called upon her mother, Earth, to attest her innocence; and the earth opened, and there arose out of the chasm a glorious throne, and on it sat, in the form of a lovely woman, the incarnate Earth, who, extending her hand to Sita, took her to her throne; when again the chasm opened, and the throne sank into it, and the earth closed for ever over the faithful Sita, "the daughter of the furrow." Rama, unable to endure life without her, "sacrificed himself in the river Sarayu," in other words, committed suicide by drowning. Such is the story of the *Ramayana* to its termination. The Hindus hold that, "whosoever reads, or hears read, the life-giving *Ramayana* is freed from all sin. Whosoever reads it, or hears it read, for the purpose of obtaining a son, will certainly have one. . . . A Brahman reaps the same advantage as from reading the *Vedas*, and a *Kshatriya* conquers his enemies, and a *Vaisya* is blessed with riches, and a *Sudra* gains a good name, by reading the *Ramayana*, or hearing it read." Again, it is said, "As long as the mountains and rivers shall continue, so long shall the story of Rama and Sita be read in the world." And nightly to listening millions are the stories of the *Ramayana* and *Mahabharata* told all over India. They are sung at all large assemblies of the people, at marriage feasts and temple services, at village festivals and the receptions of chiefs and princes. Then,

when all the gods have been duly worshipped, and the men are wearying of the meretricious posturings and grimaces of the dancing girls, and the youngsters have let off all the squibs and crackers, a reverend Brahman steps upon the scene, with the familiar bundle of inscribed palm-leaves in his hand, and, sitting down and opening them one by one upon his lap, slow and lowly begins his antique chant, and late into the starry night holds his hearers, young and old, spellbound by the story of the pure loves of Rama and Sita; and of Draupadi, who too dearly loved the bright Arjuna, and the doom of the froward sons of Dhritarashtra. Or in a gayer moment some younger voice rings out the stirring episode of Bhima's fight with Hidimba the Asura, or the hilarious distichs which tell of the youthful Krishna's sports with the milkmaids; until with laughter and with farewell greetings the assembly breaks up; when all walk off, like moving shadows, to their homes, through cool palm-groves, and moonlit fields of rice, and the now silent village streets. In India the Ramayana and Mahabharata, Rama and Sita, Hanuman and Ravana, Vishnu and the Garuda, Krishna and Radha, and the Kauravas and Pandavas are everywhere, in sculptured stone about the temples, and on the carved woodwork of houses; on the graven brass and copper of domestic utensils; or painted in fresco on walls, Rama, like Vishnu, dressed in yellow, the colour of joy, Lakshmana in purple, Bharata in green, and Satrugna in red. The figures carved on the ivory combs used by the women, and painted on the back of their looking-glasses, or wrought in their jewelry, and bed-coverings, and robes, are all illustrations of characters, scenes, and incidents, from one or other of these heroic histories. From them the later dramatists and poets have taken all their stories and songs, the historians their family genealogies, and the Brahmins their popular polytheism and moral teaching. They contain and shew in a poetical form the whole political, religious, and social life of India past and present, and will probably continue to nourish and reflect

it in all the variety and picturesqueness of its traditional composition, action, and coloring, as long as the race of Brahmanical Hindus shall endure as a separate and self-contained religious polity. They are the charm which has stayed the course of time in India, and they will probably continue for ages yet to reflect the morning star of Aryan civilisation, fixed, as it were, in the heaven of Indra, and irremovable. The Persian and Greek invasions, the Afghan and Mongol [Turkoman] conquests, exercised no lasting effect on the national mind of India, which has ever in the end subdued to its nature all the conquerors of that glorious land, in their social life, their administration, and arts; and the thoughts and feelings, and habits and customs of the Hindus will probably never be changed except under influences of a purely indigenous origin, proceeding from the development of the internal consciousness of the race. Buddhism, although it may have owed its establishment as a state religion to the foreign domination of the Scythic Nagas, who entered India in the seventh century B.C., was essentially a spontaneous movement in the democratic life of India, and endured for a thousand years, yet it also at last yielded to the organised resistance of the Code of Manu, and the mighty magic of the Ramayana and Mahabharata.

THE PURANAS.

The word *purana* means "old," and the Puranas treat of the same historical legends and mythological fictions as the Itihasas, and in their earlier forms doubtless belong to the same religious and heroic age of Hindu civilisation as the Ramayana and Mahabharata. But they give a more definite and connected representation of the cosmogony and theogony of these poems, and they expand and systematise their chronological computations and genealogies. They reduce, in fact, the formless and fleeting religious conceptions of the Vedas, and the

popular family traditions of the Itihasas, to a fixed body of definite mythology. The Vedic gods are mere abstractions, intangible and illusive personifications of the powers of nature, the rain [Indra], the light [Surya], the heat [Agni], and the wind [Vayu], whose effects on their crops were at once felt by an agricultural people, and to which the Vedic Aryas made their supplications according to their daily need, and ascribed their heartfelt praise when at length abundant harvests crowned the labours and anxieties of the year. In the Puranas the gods assume substantial shape and individual character; and for the first time a paramount place is given to the sacrificial rites and observances of their worship. In Vedic times there were no priests. In the times of the Itihasas the sacerdotal pretensions of the Brahmans became prominent, but the father of a family, or head of a state, still performed the highest religious ceremonies, such as the marriage of a daughter, or the sacrifice of a horse, without the necessary intervention of a priest. In Puranic times the Brahman is the only possible minister of the service of the gods, and the indispensable mediator between them and their worshippers.

The technical definition of a Purana is a work which treats of five topics, namely, (1) the creation of the universe, (2) its destruction and renovation, (3) the genealogy of the gods and patriarchs, (4) the reigns of the Manus, forming the periods called Manwantaras, and (5) the history of the Solar and Lunar dynasties. The eighteen Puranas are arranged in three groups, of six in each.

1. Those in which the quality of *sattwika* or goodness and purity prevails, which dwell on the stories of Hari or Vishnu and Krishna, named (1) Vishnu, (2) Naradiya, (3) Bhagavata, (4) Garuda, (5) Padma, and (6) Varaha.

2. Those in which *tamasa*, or gloom and ignorance, predominate, relating to Agni or Siva, named (1) Matsya, (2) Kurma, (3) Linga, (4) Siva, (5) Skanda, and (6) Agni.

3. Those distinguished by *rajasa* or passion, which treat chiefly of Brahma, named (1) Brahma, (2) Brahmanda, (3) Brahmavaivarta, (4) Markandeya, (5) Bhavishya, and (6) Vamana.

None of them however are really devoted to one god, and Vishnu and his incarnations fill nearly all. The most comprehensive and complete is the Vishnu Purana, and the most popular the Bhagavata Purana. The rest are very little known except to Brahmans. There is another Purana known as Vayu, supposed to be older than all, connected with the Siva and Agni Puranas, and substituted for either of these in lists in which the one or the other of them is omitted.

There are also eighteen Upa-Puranas. The Puranas are evidently works of different ages. Probably none assumed their present popular form earlier than the time of Sankara Acharya, the great Saiva reformer and founder of the Vedanta philosophy who lived in the eighth or ninth century of our era. Of the celebrated Vaishnava teachers Ramanuja lived in the twelfth century, Madhva-Acharya in the thirteenth, and Vallabha-Acharya in the sixteenth, and the Puranas seem to have followed their innovations, being evidently intended to advocate the doctrines they taught: and they must all have since received a supplementary revision, because each one of them enumerates the whole eighteen. There is very little true and unbroken historical record of anything in India until after the consolidation of the British conquest of India at the beginning of the present century.

THE CODE OF MANU.

The Manu-Sanhita, Manava Dharma Sastra, or Institutes of Manu, commonly known as the Code of Manu, is attributed, by itself, to the first Manu [the word is from the Sanskrit root *man*, to think], Swayam-bhuva, who sprang from Swayam-bhu, the "self-existing" [identified with Brahma]; and by others to the

Manu of the present period, the seventh Manu, or Vaivaswata, the son of Vaivaswat, the sun. In the Hindu mythology the name belongs to the fourteen Praja-patis, or forefathers of all creatures, each of whom presides over the destinies of men for a period, called a Manwantara, of 4,320,000 years. In the Rig-Veda Vaivaswata is the father of the Aryas and the whole human race; and it has been conjectured that his name was applied by its compilers to the Code of Manu to reconcile the Brahmanical law to the Aryan Kshatriyas. It is far older than the Puranas, its mythology exhibiting indications of the compromise with the religion of the Vedas which is observed in the Ramayana and Mahabharata. The Vedic worship was simply the natural expression of the gratitude of men for their daily bread; who, before sitting down to their meals, instinctively offered of the meat and drink before them to the gods from whom they believed these blessings came. In the Code of Manu these childlike oblations of food and wine are superseded, or overlaid by an elaborate ritual of essentially a sacrificial and propitiatory character. But the Vedic gods are not yet so completely set aside as in the Puranas, although they are all rigidly subordinated to Brahma, the especial deity of the Brahmans. Nor again have we yet in the Code of Manu any indications of that wholesale absorption of the pantheon of the aboriginal races of southern India which, as the later Puranas shew, was gradually forced on the Brahmans. The Code is on analogous grounds proved to be also older than the Ramayana and Mahabharata, in their present form, for it makes no allusion to the Kshatriya heroes Rama and Krishna, who are declared in the Itihasas to be incarnations of Vishnu. Brahmanism would seem to have first originated among Aryan colonists who established themselves between the valleys of the Indus and the Ganges about a thousand years after the Aryan conquest of the Panjab. While confined to the Panjab, the Aryas still remained a Vedic people, but on crossing over into the valley of the Ganges, they gradually became Brahmanical Hindus. The original country of the

Brahmans extended, according to the Code of Manu, along the slopes of the Himalayas between the Sarsuti and Kagar: "Between the two divine rivers Saraswati [Sarsuti] and Drishadwati [Kagar] lies the tract of land [about 100 miles N.W. of Delhi] which the sages have named Brahnavata, because it was frequented by the gods." Again: "Kurukshetra [the field of the Kurus, the country about Panipat], the Matsyas [the country about Jaipur], the Panchalas [the Gangetic Doab and Rohilkhand], and the Surasenas [the country about Mathura. Muttra]. This land, which comes to Brahnavata, is the land [Brahmarshi-desa] of the Brahmarshis" [Brahmanical Rishis]. "Here dwelt the ancient princes and sages of Hindu mythology. Here was the magnificent Sanskrit language perfected. Here the decimal notation was perfected. This is the Holy Land of India."¹ Aryavarta, the land of the Aryas, is said to be the whole tract of Hindustan between the Himalaya and Vindhya ranges, and the Bay of Bengal ["eastern sea"] and Arabian ["western"] sea: and the Code of Manu expressly forbids any Brahman, Kshatriya, or Vaisya from living beyond the Aryan pale as thus defined. Five centuries later the Aryas had so completely occupied the Dakhan that Ptolemy, the geographer of the second century A.D., and Arrian, his contemporary, distinguished western India by the name of Ariake: and *arya* is the name of the Marathas among the Konkanese of the present day, and the Mangs and other outcasts who represent the conquered native tribes of the Southern Maratha Country.² The Code of Manu thus plainly distinguishes between the country of the Brahmans, and the whole Aryan land, and it was probably in Brahnavata, or the Brahmarshi-desa, that the conceptions of priestly rule formulated in the Code of Manu first originated in the contact of some Turanian tribe with the Aryan immigrants into Hindustan from the Punjab about B.C.

¹ Quoted from Pope's *Text Book of Indian History*, third Edition, Allen and Co., London, 1880; ch. i. para. 5.

² Wilson's *India Three Thousand Years Ago*; Bombay, 1858.

1500. In its present form it dates from probably not earlier than B.C. 500, and possibly as late as B.C. 300. We are told that it originally consisted of 100,000 verses; that Narada shortened the work to 12,000; and that Sumati still further abridged it to 4,000; but only 2,685 are extant. It is the only Hindu law book necessary to mention here, being the one held in the highest reverence, and the legal foundation of the whole social, religious, economical, and political system of Hindu life.

The first chapter describes the Creation. The Supreme Being having willed to create the universe, first created the waters, and placed in them a productive egg, and in that egg He himself was born in the form of Brahma. The waters were called *nara*, because they were produced by Nara, the "Spirit of God" moving on them, and since they were his first *ayana* or "place of motion," he is hence called Narayana, or "moving on the waters." That the human race might be created he caused the Brahmans, the possessors of the Vedas, to proceed from the mouth of Brahma; the Kshatriyas, or protectors, from his arm; the Vaisyas, or producers of wealth, from his thigh; and the Sudras or labourers, from his feet. These are the four original classes of Hindus, or sacerdotal, military, industrial and servile castes. The Brahmans possibly represent the Shamans, or magicians of the prehistoric Turanian immigrants into India; the Kshatriyas their Aryan conquerors; the Vaisyas, the mixed Aryas and earlier settlers and aborigines; and the Sudras, the conquered earlier settlers, and true aborigines of India. The Purusha-Sukta, or "Hymn [*sukta*] of the First Man" [Purusha] in the Rig-Veda, mentions the names of these castes—"When they produced *Purusha* . . . the Brahman was his mouth; the Rajanya [prince] was his arms; the Vaisya was his thighs; and the Sudra sprang from his feet." But the Hymn is considered to be one of the latest in date, and the passage quoted from it to be only figurative. The Brahmans in the Vedas are only a profession. The term *kshatriya* is used in the Vedas to denominate a person possessing

power, as a *raja* or king, and *rajanya* or prince: and the term *vaisya* is applied to any householder [from *vesha* a house, Greek *oikos*, Latin *vicus*], and so to people in general. The Sudras were probably a Cushite people who preceded the Aryas in India, and were dispersed by them. These four divisions of the Brahmanical Hindus are now wonderfully subdivided according to country, race, sect and occupation; and only the Brahmans retain the homogeneity of their order, as established by the Code of Manu. Next we are told that Brahma in himself became half male and half female, or active and passive in nature, and from his female half produced Viraj. Viraj produced Manu Swayambhuva, and he the seven other Manus, and the ten Prajapatis, and they the seven Rishis, or Bards, and the Pitris, or Fathers of Mankind. And Brahma having taught Manu "the Code of Manu," he taught it to Maricha, and the nine other Prajapatis. The sacred chronology is next expounded. There are four classes of days: 1st, of mortals; 2nd, of Pitris, which lasts a lunar month; 3rd, of the Devatas, which lasts a solar year, and 4th, a day of Brahma, which lasts 4,320,000,000 years; The year of the gods consists of 360 mortal years. The first age, or Krita Yuga, lasted 4,800 years of the gods; the second, or Treta Yuga, 3,600; the third, or Dwapara Yuga, 2,400; and the fourth, or Kali Yuga, the present, or "Black Age," which began about B.C. 3101, is limited to 1,200 years of the gods. The four Yugas make up the Maha Yuga, or great age: and one thousand Maha Yugas form a Kalpa, or day of Brahma. This is the Brahmanical chronology of the Code of Manu, but along with it there is the recognition of the chronological system of Manwantaras, based on the reigns of successive Manus, evidently handed down from Vedic times. Each Manu was supposed to reign for 4,320,000 years.

The second chapter, "On Education, or on the Sacerdotal Class, and the First Order," distinguished between the revealed [*sruti*] and inspired [*smriti*] scriptures, defines the limits of

Brahmavarta, Brahmarshi-desa, and Aryavarta, which latter is also said to be coextensive with the natural range of the Black Antelope; and prescribes the duties of the four castes. The ceremonies to be observed at conception, during pregnancy, at the birth of a child, and at its naming on the tenth or twelfth day after birth, are fully described. The first part of a Brahman's compound name should indicate holiness, of a Kshatriya's power, of a Vaisya's wealth, and of a Sudra's contempt; and the second part of a Brahman's name prosperity, of a Kshatriya's preservation, of a Vaisya's alms, and of a Sudra's humility. The names of women, it is said, should be soft, clear, and captivating, ending in long vowels like words of benediction. In the fourth month of its age the child should be carried out to see the sun, and in the ninth should be fed on rice, "or that may be done which by the mother is thought most propitious." The ceremony of the tonsure should be performed by the first three classes in the first or third year after birth: and in the eighth year from the conception of a Brahman, in the eleventh of a Kshatriya, and in the twelfth of a Vaisya, the child must be invested with the sacred cord or sacrificial thread; or it may be in the fifth, sixth, and eighth year respectively. The sacrificial thread of the Brahman must be of cotton only, of the Kshatriya of hemp only, and of the Vaisya of wool only. The staff of the Brahman should be of *bilva* or *palasa*, of a Kshatriya of *bata* or *chadiva*, and of a Vaisya of *vinu* or *adambara*. In the case of women the nuptial ceremony is considered to take the place of the investiture of boys with the sacrificial thread, as the last purification fitting them to enter on life, marriage being held to be the complete institution of a woman. "Such is the revealed law of the institution of the twice-born classes, an institution in which their second birth chiefly consists." After initiation the life of every man is divided into four stages or orders, namely, (1) that of *brahmachari*, or student of the Vedas; (2) of *grihastha* or married man and householder; (3) of *vana-prastha* or hermit

and (4) *sannyasi* or devotee. Few, except Brahmans, ever enter on the duties of the last two orders, but the system of these four orders is universally recognised by Hindus. The directions for reading the Vedas, and governing the relations of students and their teachers are most minute and rigorous. Three classes of Brahman teachers are recognised, (1), the *acharya*, or spiritual preceptor; (2), the *upadhyaya*, or schoolmaster proper, who instructs in pronunciation, grammar, metre, the explanation of words, astronomy, and ceremonial; and (3), the *ritvij* or sacrificer. The Brahman in beginning or ending his lecture must always pronounce "the three-in-one" syllable, AUM or OM. "Sitting on culms of *kusa* grass, with all their points towards the east, or rising sun, and purified by rubbing that holy grass in both his hands, and further prepared by three suppressions of breath, each equal in time to five short vowels, he may then fitly breathe the syllable OM. Brahma milked out as it were from the three Vedas [Manu does not recognise the 4th Veda], the letter A, the letter U, and the letter M, which form the trilateral monosyllable, together with the mystical words [*vyahritis*], *bhur*, *bhuvah*, *swar*, or earth, mid-air or sky, and heaven; and the three measures of that ineffable text beginning with the word *tad*, entitled the *savitri* [sun] or *gayatri*." The syllable AUM is the symbol of the Hindu *tri-murti*, or "triple-form," A being Vishnu, U Siva, and M Brahma; and from the Nirukta, or ancient glossary of the Vedas, we learn that the separate letters of this mystic syllable refer also to Agni [fire], Indra [sky], or Vayu [air or wind], and Surya, [sun]: and further that all the gods are resolvable into these three. Every god is thus included in the mystic syllable AUM or OM. The Brahmans, by the application of this symbol to their *tri-murti*, mean to assert that Brahma, Vishnu and Siva, include the whole Vedic gods. The words *bhur*, *bhuvah*, *swar*, earth, mid-air or sky, and heaven, signify the same thing, as also do the three conceptions of the sun as the Supreme Deity, as the God-head, and as the Illuminator of his worshippers, set forth in the

"three measures" of the *gayatri*. Thus three times before every act does a Brahman fix his mind on Brahma as the god of all gods.

The third chapter is "On Marriage and the Second Order," in which the whole duties of a householder are prescribed, namely, the daily sacrifice at every meal to the Rishis or Vedic bards, by the reading of the Vedas; to the Vedic Pitris, or departed forefathers, by the offering of cakes and water; to the Devatas or Vedic gods by the offering of ghee, that is, clarified butter; to the Spirits of all things existing, of the air, the water, the earth, by the offering of rice; and to men by the exercise of hospitality, particularly towards Brahmans. It is emphatically declared that he who partakes of food before it has been offered in sacrifice as above prescribed, eats but to his own damnation.

The daily sacrifices to the Devatas, and to Spirits and Ghosts, are most instructive. The Code directs the oblations of ghee, for the propitiation of the Vedic gods, to be offered firstly to Agni [fire], secondly to Soma [the moon], thirdly to Agni and Soma together, fourthly to Kuhu [the day in its first and second quarters], fifthly to Anumati [the day in its third and fourth quarters], sixthly to the Prajapatis [the lords of creation], seventhly to Dyava and Prithivi [heaven and earth], eighthly to the fire of the sacrifice, and ninthly to the four quarters, Indra [east], Yama [south], Varuna [west], and Soma [north-east]. Here we see Indra, Yama, Varuna, and Soma, who were worshipped by the Vedic Aryans as great and independent deities, reduced to the position of guardians of the four quarters of the earth.

In the propitiation of the spirits, after the rice had been cooked, every twice-born householder has to offer it according to the following ritual: 1. He has to throw boiled rice near his door, saying, "I salute you, O Maruts" [storms]. 2. He has to throw boiled rice in the water, saying, "I salute you, O water gods." 3. He has to throw boiled rice in his pestle and mortar, saying,

"I salute you, O god of large trees." After this he has to throw rice near his pillow to Sri, or Lakshmi; at the foot of his bed to Bhadra-Kali, or Durga; in the middle of his house to Brahma, and the Lar; and up into the air to all the gods; by day to the spirits who walk in light, and by night to the spirits who walk in darkness. He has then to throw his offering for all creatures in the building, on the top of his house, or behind his back; and what remained he has to offer to the Pitris with his face to the south. Here we find the worship of the fetish Maruts, which in the Vedas are already opposed to Indra, prominently introduced. Next follows the propitiation of Lakshmi the wife of Vishnu and of Devi, or Kali, the wife of Siva.

The ceremonies of marriage are elaborately developed, as also those of the *sraddha* or feast of the dead. A supreme importance is attached to the due observance of these funeral rites, one name for the Brahmans being "gods of the obsequies." The funeral *sraddha* has to be performed within a fixed period after death, or of hearing of the death of a near kinsman. A monthly *sraddha* has to be performed for every near paternal ancestor, and the daily *sraddha* for Pitris, or remote ancestors, as already stated.

The fourth chapter is "On Economics or Domestic Morals," and treats of the various means of earning a livelihood; and here it is laid down that service for hire, or "dog-livelihood," must by all means be avoided by the twice-born. No livelihood may be pursued that impedes the study of the sacred scriptures, nor may money be made by any art that pleases the senses, such as music and dancing, or by taking gifts indiscriminately. Strict rules are laid down for giving and receiving presents and accepting alms; and a number of daily and other periodic religious observances are prescribed; also the manner of bathing.

The fifth chapter is "On Diet, Purification, and Women," and enters most minutely into every particular on which the twice-born can possibly require guidance. The sixth chapter, "On Devotion,

and the Third and Fourth Orders," is for the regulation of the lives of the *vanaprastha* or hermit, and *sannyasi* or devotee. The seventh chapter, "On Government and Public Law," lays down the duties of kings, and of the Kshatriyas or governing class.

The eighth chapter is "On Judicature, and on Civil and Criminal Law;" the ninth "On the Commercial and Servile Classes;" the tenth "On the Mixed Classes, and on Times of Distress;" the eleventh "On Penance and Expiation;" and the twelfth chapter, "On Transmigration, and Final Beatitude," concludes the Code.

The seventh chapter supplies a systematic contemporary account of the social and religious institutions of ancient India, as with very slight modifications they still exist. The village system it describes is the permanent endowment of the traditional arts of India, and has scarcely altered since the days of Manu. Each community is a little republic, and manages its own affairs, so far as it is allowed, having rude municipal institutions perfectly effectual for the purposes of self-government and protection. Its relations with the central Government are conducted by a headman, and its internal administration by a staff of hereditary officers, consisting of an accountant, watchman, money-changer, smith, potter, carpenter, barber, shoemaker, astrologer, and other functionaries, including, in some villages, a dancing girl, and a poet or genealogist. This whole chapter is of the deepest interest. The form of government it enforces is in marked contrast with the feudal type of the original Vedic traditions to be found running through the Brahmanical revisals of the Ramayana and Mahabharata. All traces of patriotism and of the sentiment of devotion to the common weal, and of loyalty to great national leaders, which are found in every true Aryan race, and certainly characterised the Vedic Aryas of India, and which are essential to the preservation of the liberties and independence of states and empires, have been eliminated from the sacerdotal system of Manu. It

recognises only the narrow interests of the family, the village, and, in a very limited degree, except among Brahmans, the caste. Thus for nearly three thousand years it has suppressed all sense of nationality and public spirit in India, while fostering to the utmost the self-contained life of the petty religious communes, which possess no other bond of union but that of a religion organised expressly to bring the forces of progress inherent in every Aryan race into subjection to the dominant priesthood. The kings and the people are integral parts of a divine law of which only the Brahman is the rightful administrator. But while the system failed utterly to provide for the external defence of the country, it has rendered it proof against internal revolution. It is the true charter of the landed democracy of India, and in giving permanence to the proprietorship of the peasantry in the soil of the country, it has conserved Hindu society intact and unaltered through successive overwhelming invasions and a thousand years of continuous foreign rule. India is in fact the only Aryan country which has maintained the continuity of its marvellous social, religious, and economical life, from the earliest antiquity to the present day.

THE TANTRAS.

The Tantras represent the lowest abasement reached by the Brahmans in their endeavours to bring the aboriginal races of India under their power. The word *tantra* signifies "rule" or "ritual," and the Tantras are a numerous class of works, generally of late date, devoted to the worship of the *sakti*, *prakriti*, or female energy of nature, as represented by the wives of Vishnu and Siva. But it is not Lakshmi who is worshipped as Vishnu's *sakti*, but Radha, the mistress of the amorous Krishna, the other-self of Vishnu; and by far the most popular object of Tantric worship is Devi, in one or other of her manifold forms. Each *sakti* is regarded as having a twofold

nature, white or gentle, and black or fierce; Uma and Gauri being the gentle forms of Devi or Parvati, and Durga and Kali, the fierce or black; and the five essential elements of the worship of either nature are wine, flesh, fish, parched grain, and intercourse of sexes. The worshippers are also divided into two orders, Dakshinacharis, or right-handed, and Vamacharis, or left-handed; and the rites, or rather orgies, of the latter are licentious beyond description. Tantric worship prevails in its grossest forms among most of the lower races of India, and particularly in parts of Bengal. Its influence on Indian art, however, is almost inappreciable.

THE GODS OF INDIA.

Having said so much on the general subject of Hindu mythology, I shall, in particularising the individual gods to be now enumerated, restrict myself as much as possible to a bare technical description of their forms, colours, and attributes. They are enumerated simply as a key to the universal symbolism of Indian art. In the accompanying engravings Mr. Reid has been careful to give as clear a definition as is possible on so small a scale of their distinguishing attributes.

They naturally fall into the two groups of the Vedic and the Puranic gods.

THE VEDIC GODS.

There is no systematic theology in the Vedas. The hymns of the Rig-Veda are the first and freshest expression of the sense of beauty and gladness awakened in the Aryan race by the charms and the bounty of nature; and the gods of the Vedas are in their apparent origin no more than poetic epithets of space, the heavens, the firmament, sun and earth, day and night, twilight and dawn, wind and rain, storm and sunshine; all ministering

to the divine care of man, in the breathing air and radiant light, the fleeting moon and constant stars, the rising mists and falling dews, and the rivers which flow down from the hills through the fruitful plains, making with the flocks and herds, and woods and fields, one ceaseless voice of praise and adoration. The etymological meaning of most of these epithets is so clear that it at once explains the myths, which, in the course of time, became attached to them. Thus the Vedas shew exactly how the words uttered three thousand years ago by the Vedic bards or *rishis*, gradually became the gods of India, Greece, and Rome. They are the real theogony of the Aryan race.¹

These worshipful epithets began to be transformed into more or less questionable personifications of the natural appearances and operations to which they were applied in the Vedic age itself; but even in the case of those Vedic gods which assumed the most undoubted personality, we seldom or never lose sight, in the Vedas, of the real qualities intended to be expressed by their names. They have no fixed hierarchy, or regular genealogy, no settled marriages and relationships; and they remain to the last transparent reflexions of those physical phenomena and powers of which they are the earliest known appellations. It is only in the Puranas that they become invested with a strong personality, and it is in their order among the Puranic gods that the conventional representation of them in the later mythology of the Hindus will be more appropriately described. The Rig-Veda refers to thirty-three gods in the following verse: "Gods who are eleven in earth, who are eleven dwelling in glory in mid air, and who are eleven in heaven, may ye be pleased with this our sacrifice:" and the Brahmans, by adding, according to their manner of puerile exaggeration, seven ciphers to this number, have multiplied it to 330,000,000. Indeed, in the Rig-Veda itself we see the beginning of this mode of increasing the glory of the gods of

¹ Max Müller's "Comparative Mythology" in *Oxford Essays* for 1853.

India, in the verse: "Let the three thousand, three hundred, and thirty-nine gods glorify Agni."

AGNI [ignis], the personification of fire, was one of the most ancient, and is still one of the most sacred objects of Hindu worship. He appears as fire on earth, as lightning in mid air, and as the sun in heaven. He is one of the three great Vedic deities; Agni [fire], Indra [the firmament], or Vayu [the wind], and Surya [the sun], who respectively preside over earth, the sky or mid-air, and heaven; and in the Vedas more hymns are addressed to him than to any other god.

INDRA, the firmament, sky, or mid-air, is equal in rank with Agni, but, unlike Agni, is not uncreate, being already represented as having a father and mother. He is described as of a golden or ruddy colour, but of endless forms, and he rides in a bright golden car, drawn by two tawny orange horses, and is armed with the *vajra*, or thunderbolt, and a net in which he entangles his enemies. He also uses arrows. He is attended by the dog *Sarama*, identified by some with *Ushas*, the dawn. He delights in drinking the intoxicating *soma*, the *amrita*, or water of life, or immortality of the Vedas. He sends the rain, and rules the weather, and more hymns are addressed to him in the Vedas than to any other god excepting Agni; while in the Puranic pantheon he ranks after the triad [Brahma, Vishnu, and Siva], chief of all the other gods. Strabo describes the Hindus as worshippers of Jupiter Pluvius, meaning Indra. There is another Vedic personification of rain named *Parjana*, and the name is sometimes combined with the word *Vata*, a Vedic personification of wind, in the form *Parjana-Vata*.

VAYU [air, wind] is the great Vedic personification of wind, and is generally associated and often identified with Indra. His other names are PAVANA, "the purifier," *Gandha-vaha*, "bearer of perfumes," and *Satata-ga*, "ever moving." *Vata* ["wind"] is generally the same as Vayu, but sometimes they are mentioned distinctively.

SURYA is the personification of the sun, and is identified with SAVITRI, "the nourisher," VISVASWAT, "the brilliant," and RAVI, and ADITYA.

The Nighantu, or Glossary of the Vedas, arranges the names it gives of all the gods as synonyms of Agni, Indra or Vayu, and Surya; and in the Nirukta, or etymological glossary [forming one of the Vedangas] it is twice asserted that there are but three gods, and over and over again that these three are but varying forms of one. In the Rig-Veda, VISHNU, "the pervader," is named as a manifestation of the Sun, with *tri-vikrama*, or "of triple-power," for one of his epithets; referring to his three places on earth, in the sky or mid-air, and heaven, as Agni, Indra or Vayu, and Surya. This Vedic triad is obviously the prototype of the Puranic *tri-murti*, or "tripleform," Brahma, Vishnu, and Siva.

SOMA is the Vedic personification of the intoxicating juice of the *soma* plant, and as it was gathered by moonlight, the name was appropriated in later times to the moon, CHANDRA, and some of the qualities of the juice were transferred to that luminary as *Oshadhi-pati*, "lord of herbs."

VARUNA [*óvpaṛós*], "the universal embracer and encompasser," is one of the oldest Vedic deities, the personification of the all-investing sky, the maker, and upholder of heaven and earth. Later he becomes the god of the sea.

YAMA, "the restrainer," with his twin sister *Yamuni*, is the personification of the first human pair, and hence of death, and, in the later mythology, of judgment. He has for his watchdogs the two *Sarameyas*, born of Sarama, Indra's dog.

KUVERA, in the Vedas, is the chief of the evil spirits living in the shades, and the god of wealth.

These are the eight Vedic gods which received the most developed mythological personification, and they all rank as *dii selecti*, immediately after Brahma, Vishnu, and Siva, in the first order of the celestial deities—the *dii majorum gentium*—of the Puranic pantheon.

In the Vedas the firmament is also personified by *Dyaus*, "the heavens," or *Dyaus-pitri* [Zeus-pater, Jupiter], the "heavenly father." *Prithivi*, "the wide world," is the earth mother, and *Dyava-Prithivi*, "heaven and earth," are represented as the universal parents, not only of mankind, but of all things living. *Ushas* [ἠώς, Aurora], the daughter of *Dyaus*, is the dawn, one of the most beautiful of the Vedic myths; and before her go, the day's harbingers, the ever young and bright *Aswins*, who are personifications of the twilight which precedes the dawn, and identical with the twin sons of Zeus and Leda. The Apsara [nymph] *Urvasi* is another name of the dawn, and the story of her loves with Pururavas is a myth of the absorption of the mists of morning by the rising sun. similar to the Greek fairy story of Kephalos and Procris. *Nakta* [νύξ, νυκτός], the night, is a goddess. *Aditi* ["free," "unbounded,"] is space, infinity, personified, and she is termed in the Rig-Veda *Deva-matri*, "mother of the gods." The twelve *Adityas* are her sons, and are the sun in the twelve months of the year. The *Daityas*, or Titans, who war against the gods, are the sons of *Diti*, the antithesis of *Aditi*. *Hiranyagarbha*, literally "golden womb" or egg, *Prajapati*, "father of creatures," *Skambha*, "fulcrum," *Daksha*, the personification of creative energy, *Dhatri*, "maker," *Mitra* [the Persian Mithra], and other names, are all personifications of the sun. This fact is shewn also by their being numbered among the *Adityas*, but they are appellations of the solar power rather than distinct personalities. The twelve *Adityas*, namely, *Mitra*, *Aryaman*, *Bhaga*, *Varuna*, *Daksha*, *Ansa*, *Indra*, *Savitri*, *Dhatri*, *Ravi*, *Yama*, and *Surya*; the eight *Vasus*, attendants on *Indra*, namely *Apa* [water], *Dhruva* [the Pole star], *Soma* [the moon], *Dhara* [Terra, the earth], *Anala* [fire], *Anila* [wind], *Prabhasa* [the dawn], and *Pratyusha* [light]; and the eleven *Rudras*, or *Ugras*, who are sons of *Rudra* [howler or roarer], the terrible god of storms, and appear to be identical with the *Maruts*, form the *Tridasa*, or company of "three times ten" gods. The *Vishwadevas* ["all the gods"] in the Vedas form a band of nine gods. The

Yoni-devas [of "divine birth"] is another general name for the inferior deities. The *Bhrigus*, "roasters," are spoken of as producers of fire, and chariot makers, connected with Agni. The *Ribhus* are three brothers, Ribhu, Vibhu, and Vaja, celebrated smiths who made Indra's chariot. *Viswakarma*, "the omnificent," is the architect of the heavens, and identified originally with Surya and Indra. *Twashtri* in the Rig-Veda is the ideal artist, the framer of the world, who forges the thunderbolts of Indra, and is associated with the *Bhrigus* and *Ribhus*. Like Hephaistos, he is represented as deformed in his legs. The *Pitris* are the ghosts of the ancestral "fathers." *Sindhu*, the Indus, is a god, and all the other rivers of the Sapta-Sindhava [Panjab and Sindh] are goddesses. *Bharati*, the earth, as possessed by man, and *Saraswati*, the personification of the seventh river of the Panjab in ancient times, and *Ida* or *Ila*, the personification of milk and wheat, are the three Vedic goddesses of song and praise. *Aranyani* is the goddess of woods and forests, the *Aptyas* are water goddesses, the *Apsaras*, or mists, are the nymphs of Indra's heaven, of whom the loveliest is *Urvashi*, and the *Gandharvas*, originally a hill tribe, are the celestial minstrels of whom in the later mythology *Narada* becomes the leader. The principal demons named in the Vedas are the "black" *Dasyus*, the "niggard" *Panis*, and the *Rakshasas*, all evidently referring to the wild tribes who infested the neighbourhood of the early settlements of the Aryas in the Panjab, and the *Asuras*. In the oldest part of the Rig-Veda the word *Asura* is used for the Supreme Spirit, and is the same as the *Ahura* of the Zoroastrians; but in the latter parts of the Rig-Veda it signifies, as in the Puranic mythology, a demon, and this change in its meaning probably grew out of the religious quarrel of Indian Aryas with the Persians, which led the Persians to use the Hindu word *devas*, or "gods," for devils, and the name of Indra for the devil himself, *Andar*. In Persian *Ahura-Mazda* is Hormazd, the "multi-scient master," the sun. In the Vedic and Puranic mythology

everything seems directly or indirectly to merge in, or radiate from, the sun, Surya. The *Arushas* ["red"] of the Rig-Veda and *Rohitas* ["red"] of the Atharva-Veda are the red horses of the rising sun; and the *Haritas* ["green"], or green horses, are typical of the radiant beams of the rising and setting sun. The winged horse *Tarkshya* is a very ancient mythological personification of the sun. The other mythical animals of the Vedas are the serpents *Ahi* and *Vitra*, the demons of drought, and *Sarama*, the watchdog of Indra, and mother of the two *Saramayas*, attendants of Yama. The breath of life is personified by *Prana*, speech as *Vach*, divine providence by *Pushan*, faith by *Sraddha*, the outraged conscience by *Saranyu*, vice as *Agha*, and death by *Nirriti*. One of the most remarkable personifications is that of the hearing of prayer by the god to whom it is addressed. This is personified in the Rig-Veda as *Brahmanaspati*, or *Brihaspati*. In one place he is called the father of prayer, and he certainly foreshadows the priestly office of the Brahmans. He too is identified with the sun, for it is Agni who is addressed as *Brahmanaspati*, "the lord of prayer," and in one place he is named *Brahma*, "he of prayer," *brahma* in the neuter gender meaning "prayer." *Brihaspati* in the Vedas is not the planet with which he is afterwards identified as its regent; but *Sukra*, identical with *Usanas*, the planet Venus, and its regent, is mentioned in the Sama-Veda as intoxicated with the *soma* juice. *Vastoshpati*, the "house protector," is one of the later gods of the Vedas. The *Rishis*, or reputed authors of the Vedic hymns, play a great part in the subsequent Puranic mythology as progenitors of the gods and heroes, and the following are the principal: Agastya, Angiras, Archanas, Asanga, Atri, Bharadwaga, Bhrigu, Budha, the four Gaupayanas, sons of Gopa, the authors of four remarkable hymns in the Rig-Veda, Gritsamada, Kakshivat, Kanwa, Kasyapa, Kava-sha, Kutsa, Mudgala, Narada, Parasara, Prithi, Syavaswa, and Vama Deva.

THE PURANIC GODS.

BRAHM. In the esoteric teaching of the Brahmans, the absolute unity of the Divine Nature is recognised under the name of Brahm, but the doctrine is held only as a philosophical speculation, which has not the slightest influence on the exoteric religion of the Hindus. In fact, the idea of Brahm is a falsification, in its very origin, of the true conception of the Godhead. The Vedic Aryas were being gradually guided, from the simple worship of the sublimer manifestations of nature, to the recognition of the One True God and Father of Mankind; but they were led astray from it by the Brahmanical invention of Brahm. Imperceptibly their first simple services of prayer and praise became invested, by the officiating Brahmans of a later time, with a sacrificial and propitiatory character; and if prayer [*brahm*] could move the gods, prayer [*brahm*], it would be easy to argue, was greater than the gods, and Brahm the god over all gods, and his *brahmans*, or prayer-bearers, men over all men. But this conception of Brahm, so far from being antagonistic to polytheism, was dependent on it, and favorable to it; for in proportion to the multitude of gods would be the greatness of Brahm and the Brahmans. It is not surprising, therefore, that the pure monotheistic dogmas which have become attached to the idea of Brahm have had no purifying influence on popular Hinduism. The etymology of the word betrays its real meaning, and convicts Brahm of having no reference to the One True God, and of being essentially a sacerdotal invention, or cabalistic secret, existing only in the ritualistic mysteries administered by the Brahmans: and so we find the Brahmans in practice permitting the most puerile superstitions, and the grossest idolatry, wherever their own authority as mediators between men and their gods is accepted. In the later philosophy of the Brahmans, the "One Eternal Mind, the Self-Existing, Incomprehensible Spirit," is identified with Brahm. He alone, it is said, really and absolutely exists, even Brahma, Siva, and Vishnu, being

but *mayas* or illusions of Brahm; and the final beatitude of the Hindu consists in being absorbed into Brahm.

Having willed to create the world, he first with a thought created the waters, and placed in them a seed, and that seed became an egg, and in that egg he was born himself as Brahma the *Prajapati*, or forefather of all beings; and because the spirit of Brahm moved on the waters, he is hence named *Narayana*, or "moving on the waters." He is also called *Iswara*, "lord," and *Parameswara*, "supreme lord." But all these names are also applied to each of the persons of the Hindu triad by their respective votaries, the Vaishnavas identifying even *Narayana* [Plate C, Fig. 1] with Vishnu, and the Saivas with Siva. One of his names is *Kala-Hansa*. There are no temples raised to Brahm, and no direct worship is paid to him. It is said that "of him who is so great there is no image," but the true reason is because every image, every temple is his, and he is worshipped in every form, every offering and prayer being indeed himself

THE GREATER GODS: DII MAJORUM GENTIUM.

BRAHMA [Plate C, Fig. 3] is the first person of the Hindu *tri-murti*, "triple-form," or triad [Plate C, Fig. 2]. He is Brahm manifested as the active creator of the universe. He sprang from the mundane egg; and, dividing himself into male and female, produced the *Bramadikas* or *Praja-patis*, the "fathers of all creatures," the *Manus*, and the *Rishis*. His male half is called *Purusha*, the "first man," and *Viraj*; but sometimes these persons are represented as one the son of the other, *Viraj* of *Purusha*, or *Purusha* of *Viraj*; and again they are represented as sons of *Sata-rupa*, Brahma's female half. From *Viraj* sprang the Manu Swayambhuva [*i.e.* the son of Swayambhu, the self-existing, *i.e.* Brahma], and from him the *Prajapatis*, namely, Marichi [chief of the Maruts], Atri, Angiras, Pulastya, Pulaha, Kratu, Vasishtha, Prachetas or Daksha, Bhrigu, and Narada.

Sometimes Swayambhuva is said to spring directly from Brahma, and again from the Prajapatis. These *Prajapatis* produced the seven *Manus*, Swayambhuva, Swarochisha, Auttami, Tamasa, Raivata, Chakshuha, and Vaivaswata or Satya-vrata, the Manu of the present age; to whom seven more are added, Savarna, Daksha-savarna, Brahma-savarna, Dharma-savarna, Rudra-savarna, Ranchya, and Bhautya. These *Manus* produced the seven *Rishis*, said by others to have been produced direct by Brahma, namely, Gautama, Bharadwaja, Viswamitra, Jamadagni, Vasishtha, Kasyapa, and Atri. They are represented in the heavens by the seven stars of the Great Bear, and are fabled to be married to the seven Pleiades or *Krittikas*. The original seven *Prajapatis*, *Manus*, and *Rishis* refer probably to the same persons, men of traditional fame among the early Aryas, whom the Brahmans adopted into their omnivorous pantheon, and made the sons of Brahma.

Although the name of Brahma is the most familiar of all the gods of the Hindu mythology to Europeans, his worship in India is almost extinct, if indeed it was ever very popular. There are few, if any, temples dedicated to him. I know of only the one on the lake Pushkar [Pokhar] near Ajmir, in Rajputana; but his image is placed in the temples of all the other gods.

He is represented as a red or gold-colored man, robed in white, and seated on his *vahan*, or vehicle, the *hansa*, or swan. He has four heads, each crowned with a sort of tiara, and four arms. Generally in one hand he holds a portion of the Vedas, in another a *mala* or rosary, in the third a *lota* [water-vessel] containing Ganges water, and in the fourth a *surua* or spoon for lustrations. Sometimes he holds a sceptre in one hand, and his bow *Pari-vata* in another: and sometimes he holds nothing in two of his hands, one of them being held downward, forbidding fear, and inviting the worshipper's approach, and the other raised in blessing. Often he is represented as a Brahman at *pooja* or worship. His paradise is Brahma-pura, on the summit of Mount Meru, encircled by the sacred Ganges.

SARASWATI [Plate C, Fig. 4], his *prakriti*, *sakti*, or consort, is represented as a fair and graceful woman, crowned with the crescent on her brow, and either seated on a swan, or peacock, or paddy bird [for the *hansa vahan* is represented by each of these three birds in different parts of India], or standing on a lotus. In one hand, as *Vach*, the goddess of speech, she holds a written scroll, and in the other, as the goddess of music and song, the *vina*, or viol, formed of two gourds. Sometimes, as the goddess of the river from which she takes her name, she holds a *padma*, or lotus-flower, in one hand, and a cup of water in the other. When four-armed, she holds all these emblems in her several hands.

VISHNU [Plates C, D, F, G, H, J], or HARI, is in himself and his several incarnations, the most popular of all the Hindu deities, not excepting Siva, and receives unbounded adoration all over India. The Vaishnavas are divided into many sects, one adoring Krishna as Vishnu, another Krishna's *sakti* Radha, a third Krishna and Radha conjointly; while others adore Rama Chandra and his *sakti* Sita, either separately or conjointly. Vishnu is the second person in the *tri-murti* or triple form, and personifies the preserving power of nature. His followers identify him with *Narayana* [Plate C, Fig. 1], and *Parameswara*, and represent him as the progenitor of Siva and Brahma. When the whole earth was covered with water, Vishnu lay asleep, extended on the serpent Ananta ["the infinite"], or Sesha, and while he slept, a lotus sprang from his navel, and from its flower Brahma [Plate D, Fig. 1]. The type of Siva is the *yonī-linga*, and the navel of Vishnu is compared to this *yonī-linga* emblem, and exalted over it by the Vaishnavas, and thus it often becomes almost impossible to distinguish between Vaishnavas and Saivas. I have seen the forms of Vishnu and Siva combined in one idol. He is represented as a dark blue or black man, with four arms, his two right hands holding the *gadha* or mace, called *Kaumodaki*, and a *padma* or lotus-flower, and his two left the terrible *chakra* or discus, named *Vajranabha*, and the *sankha* or chank-shell, named

Panchajanya. Sometimes he holds only the shell and the discus, or thunderbolt, while with his second left hand he forbids fear, and with his second right hand bestows blessing. He has a bow called *Sarnga*, and a sword called *Nandaka*. He has on his breast a peculiar curl called *Sri-vatsa*, and the jewel *Kaustubha*, and on his wrist the jewel *Syamantaka*. He is clothed in yellow; hence one of his names, *Pitamber*; and he has for his *vahan* of vehicle the mythical bird, half man, half vulture, *Garuda*. Often he is represented seated with his consort *Lakshmi* on the coils of *Sesha-Naga*, or *Ananta*. His heaven is *Vaikuntha*, or *Vaibhaja*, on Mount *Meru*. His *avatars* ["descents"], or incarnations, are ten. First, the *Matsya*, or fish, said to have reference to the universal deluge from the waters of which he in this form recovered the *Vedas*. Second, the *Kurma*, or tortoise, in which incarnation he churned the ocean for *amrita*, the water of life or immortality. He placed himself at the bottom of the sea of milk, and made his back a pivot for Mount *Meru*, round which the gods and demons twisted the *Naga* or snake *Vasuki*, and, pulling it backward and forward, thus churned the ocean, which delivered up in succession the fourteen gems, namely, 1. *Amrita*; 2. The physician *Dhanwantari*; 3. *Lakshmi*, Vishnu's consort; 4. *Sura*, the goddess of wine; 5. *Chandra*, the moon; 6. *Rambha*, the *Apsara*, the type of womanly loveliness and amiability; 7. *Uchchaisravas*, the eight-headed horse; 8. *Kaustubha*, the jewel on Vishnu's breast; 9. *Parijata*, the celestial tree; 10. *Surabhi*, the cow of plenty; 11. *Airavata*, Indra's elephant; 12. *Sankha*, the chank-shell of victory; 13. *Dhanu*, a famous bow; 14. *Visha*, poison. His third *avatar* is *Varaha*, the boar, which, when the earth was drowned in the ocean, lifted it up again with its tusks. The fourth, *Nara-Sinha*, the man-lion; and the fifth, *Vamana*, the dwarf. These are all purely mythological *avatars*. The sixth, *Parasurama*, or "Rama with the axe," the seventh, *Rama Chandra*, or "Rama with the bow," the eighth, *Krishna*, and the ninth, *Buddha*, are legendary and

historical ; and the tenth, *Kalki*, or *Kalkin*, is prophetic, being the incarnation in which Vishnu is to appear at the consummation of all things, at the close of the *Kali Yug*, or "black age," seated on a pale "white horse" with a drawn sword like a blazing comet in his hand, for the final destruction of the wicked, and the renovation of creation in perfected purity. When Krishna is identified with Vishnu, his place is taken in the eighth avatar by his brother *Bala-Rama*, who is armed either with a *hala* or plough, or a *khetaka*, *saunanda* or club, or a *musala* or pestle, after which attributes he is named "Rama with the ploughshare," or "with the club," or "pestle," as the case may be. *Ballaji*, *Witthoba*, and *Naneshwar* are all local manifestations of Vishnu worshipped in Western India. *Kandoba*, a name also of Vishnu, is generally applied in Western India to Kande Rao, an avatar of Siva. The temple of Witthoba may be met with in every village of the Maratha country, that at Pandharpur being the most celebrated. The tomb of *Dyanobha*, one of his disciples, at Alandi near Poona is also a place of great pilgrimage.

LAKSHMI [Plates C and D], called also *SRI*, is Vishnu's *sakti*. She is the goddess of good luck and plenty. She is identified with *RAMBHA* as the ideal woman, the Hindu Venus, and when Vishnu is Krishna or Rama, she is Radha and Rukmeni, the mistresses of Krishna, or Sita the wife of Rama. She is held in high honour by Hindu women, who pay her particular worship on the third day of the light half of the moon called *Rambha-tritiya*, as an act auspicious to female beauty. She is worshipped by filling the corn-measure with wheat or other grain, and thereon placing flowers. She is represented as a lovely and benign woman, robed in yellow, holding a lotus in her hand, and seated either on a lotus, or beside Vishnu. Sometimes, as is likewise Vishnu, she is painted all yellow, and has four arms, and she holds in one of her right hands a rosary, and the *pasa* or cord in one of her left. This cord is seen also in the hands of Varuna and Siva, and is emblematical of the sea, which girdles

the earth. Lakshmi is the mother of KAMA-DEVA, the god of love. As Mombadevi she gives her name to Bombay; where she is also worshipped as Maha-Lakshmi, Kalbadevi, and Gamdevi, in the different wards of the city called after her by these names. She is indeed "our Lady of Bombay," in a special sense, and her temples at Maha-Lakshmi and in the Mombadevi ward are her two most important fanes in Western India. She has also temples of note at Tuljapur, Kolhapur, and Nasik, all in the Maratha country.

SIVA [Plates D and E], or MAHADEVA, is generally ranked as the third person of the *tri-murti*, but sometimes as the second. He personifies the destructive force of nature, or rather its transforming and reproductive power, and thus with his *sakti*, Parvati or Devi, appears under both auspicious and terrible aspects. He is confounded both with Brahma and Vishnu; and indeed in any lengthened description of one Hindu deity it is almost impossible to avoid mixing up its character and attributes with those of another. He is represented under various forms. Generally he is figured as a white or silver-colored man with five heads; and a third eye deforms each head. Each head also is surmounted by the crescent moon, and the Ganges issues from his fifth head. He has four arms, and bears in his two upper hands a *mrigu* or antelope, and a *trisula* or trident, or the *trisula* and *pasa* or cord, or the *mrigu* and *shanka* or shell; or the *dindimia*, *damaru*, or *damru*, a sort of rattling drum, shaped like an hour-glass, and a flaming bowl. With his third hand he forbids fear, and with his fourth bestows blessings. But all four hands may hold weapons or other attributes, an arrow, or a sword, or the bow *Ajagara*, or the club *Khatwanga*. He has the cobra twisted into his hair, and round his neck and wrists, and wears a necklace of human skulls called *Mand-mala*. He wears a tiger's or a deer's skin or an elephant's hide for a cloak, and sits on the lotus, while his *rathan* or vehicle is the bull *Nandi*. At the *Maha-Pratya*, or "grand consummation" of all things,

when the world and all its inhabitants, the saints, and gods, and Brahm himself, shall pass away, Siva is represented under his most terrific aspect, in the character of *Maha-Kala*, "great time," the destroyer of all things. But his most popular image, or rather symbol, is the *linga*, or phallus. This is the symbol, generally coalesced with the *yoni*, under which he is universally adored. In the Siva Purana he is made to say, "I am omnipresent, but especially in twelve forms and places," the best known of which are : (1) as *Somanatha*, "lord of the moon," at Somnath Pattan, in Gujarat, the idol that is said to have been destroyed by Mahmud of Gazni ; (2) as *Maha-Kala*, at Ujjain, whence the idol was carried off, in the reign of Altmash. A.D. 1231, to Delhi, and there destroyed ; (3) as *Rameswara*, "lord of Rama," at Rameswaram, and (4) as *Visweswara*, "lord of all," the chief object of worship at Benares. His heaven is on Mount Kailasa, north of lake Manasa [*Manasa-sarovara*], where is also Kuvera's abode. As *Kandeh Rao*, a manifestation of Siva worshipped in Western India, he rides on a horse ; as *Vira Bhadra*, also an especial object of worship in the Maratha country, he is represented armed with sword, spear, shield, and bow and arrow, with the sun, moon, and *Nandi*, and the *linga-yoni* around him, and the goat-headed Daksha by his side. Daksha was engaged in a sacrifice to which were asked all the gods but Siva, who, enraged, struck off Daksha's head, but subsequently restored him to life, and as Daksha's head could not be found, it was replaced by that of a goat or ram. As *Bhairava*, another form under which he is universally worshipped by the Marathas, he is represented riding in triumph either on *Nandi* or on a horse or dog ; or seated in state on the coils of the *Naga* or cobra, surrounded by attendants bearing the *chamara* or *chauri*, a kind of wisp made of ivory, or sandal-wood shavings, or yak's tails, and used as a symbol of royalty and divinity all over India. As *Panchamukhi-Maruti* he is worshipped in Western India, as the Hindu Hercules, his name being invoked every

time a weight is lifted. HARI-HARESHWAR is Siva coalesced with Vishnu. The twenty-ninth of every month is kept sacred by all Saivas, and especially by women; but the great annual festival of Siva, *Maha-Siva-ratri*, the "great night of Siva," is held on the 14th Magha [January-February], when, at Bombay, a fair is held at Elephanta. The great fair held on the island of Bombay, at the sacred village of Walkeshwar, for three days from the full moon of Kartika [October-November], is also in honour of Siva. He has several notable shrines in the Western Presidency, namely those of Bholeshwar and Walkeshwar in Bombay, of Mahabaleshwar at Go-Karn ["cow's ear"], of Kankeshwar at Alibagh and Matwan, of Taneshwar also at Malwan, of Hari-Hareshwar at Savarndrug, and of Dhopeshwar at Rajapur. As *Kandoba*, the family god of the Marathas, his chief temple is at Jejuri, in the Poona collectorate.

PARVATI [Plates D and E], "the mountaineer," known also as DEVI, the "bright," or the "goddess," KALI, the "black," DURGA, the "inaccessible," VIJAYA, the "victorious" [*i.e.* VICTORIA], KUMARI, the "damsel," BHAVANI, and a hundred other names, significant of her twofold aspect of benignity and terror. In the former aspect she coalesces with Lakshmi. Thus as ANNA PURNA, "full of food," she is worshipped, like SRI, for her power of giving food; and as GAURI, "the brilliant" ["yellow"], UMA, "the light," KAMASHI, "the wanton-eyed," she coalesces with Lakshmi as RAMBHA, the Hindu Venus. But it is in her sterner and more destructive aspects that she is most popular, as the austere PARVATI, and KUMARI, and VINDHYAVASINI, "the dweller in the Vindhya"; where, near Mirzapur, the blood before her image is never allowed to cease from flowing. As Kumari she has given her name to Cape Comorin ever since the days of Pliny. As Kali she gives her name to Calcutta [Kali-Ghat]. She has a temple also at Saptashringa near Nasik, of some repute throughout the Maratha country. Her festivals are among the most celebrated in India; the principal being the one best

known in Bengal as the *Durga Puja*, and in Western India as the *Dasara*, held annually in the month Aswina [September-October]. She is then worshipped as the slayer of the demon bull [Minotaur] *Mahishasura*; the myth being allegorised as the triumph of virtue over vice. The *Durga Puja* is the saturnalia of the autumnal equinox in Bengal, but among the Marathas of Western India the *Dasara* is characteristically kept as a great military pageant, in which the chiefs lead forth their horses in full panoply of war, and garlanded with flowers. Another great festival, the *Dewali*, or "feast of lanterns," held in the new moon of Kartika [October-November], originated in her honour, and is kept in her honour in most parts of India; but in Bombay it seems more peculiarly consecrated to Lakshmi. A festival is observed also on the new moon of Sravana [July-August] for the propitiation of the 8, or $8 \times 8 = 64$ *Yoginis* or sorceresses, the female demons attending on Parvati as Kali. As Parvati she is represented as a fair and saintly woman engaged in the worship of the *linga*, or seated by the side of Siva, to whom she offers *amrita* from a golden bowl. As Anna Purna she sits on a water-lily, holding a dish of rice in one hand and a spoon in the other, and Siva stands before her as a naked mendicant asking for relief. As the mother of *Ganesha* she is represented sitting on a water-lily, robed in red, with the infant *Ganesha* at her breast. Sometimes she sits with *Ganesha* on *Nandi* behind Siva, who holds his other son *Karttikeya* before him. Sometimes she is giving suck to Krishna, to destroy the poison of a bite he had received in an encounter with the hydra *Kaliya*. She is commonly represented robed in red, seated on her tiger, and holding in her four blood-stained hands the sword *Sri-garbha* ["giver of fortune," literally "womb of fortune"] and shield, and the *trisula* of Siva, and a *pinda*, or ball of rice. As the destroyer of *Mahishasura* she is seated on or attended by a lion, and, with the upraised *trisula* or trident in her hand, very closely resembles the figure of Britannia on our copper coins. In the images

worshipped as Kali she is generally represented as a black woman with four arms, having in one of her hands a scimitar, and in another the head of a giant which she holds by the hair; a third is held down inviting approach, and the fourth held up bestowing blessing. In some of her images as Bhavani and Durga she wears two dead bodies for earrings, and a necklace of skulls, and a girdle of skeletons; her hair falls down to her heels, her wildly protruding eyes are red with blood, her tongue hangs out to her chin, and her breasts down to her waist; her fingers and toes are prolonged like claws; and under her ravening feet lies the prostrate form of her husband Siva. It is the most extraordinary figure in all the Hindu pantheon, but is extremely popular in Eastern Bengal; and the oldest of the so-called "bronzes" found in India are generally of Parvati in this form of grotesque horror. As ARDHA-NARI, "half-woman," she is represented as Siva and Parvati coalesced, the right half being Siva and the left Parvati. This figure holds the *dindimia*, *pasa*, *trisula*, and in its fourth hand, a sword and is attended both by *Nandi* and a tiger, while from its head issues the sacred Ganges. As Durga her weapons are altogether twelve, and they are one and all separately invoked at her worship in the following form:

1. OM to the *khadga* [sword], the sharp-edged chastiser, the invincible, the giver of fortune [*Sri-garbha*], the defender of the faith, thee I adore, O Lord [*Isa*]!

2. OM to the *trisula* [trident], benefactor of earth, mid-air, and heaven, the destroyer of our enemies, thee I adore, O Lord!

3. OM to the *chakra* [discus, thunderbolt, or wheel], thou pervadest all nature, thou art Vishnu, thou art also Devi, O beautiful-shaped discus, thee I adore, O Lord!

4. OM to the *tir* [arrow], the chief of all weapons, the subduer of the demoniac forces from all quarters, thee I adore, O Lord!

5. OM to the *sakti* [javelin], weapon of the gods, and especially of Karttikeya, thee I adore, O Lord !

6. OM to the *khitaka* [club], the destroyer of our enemies, held in Devi's hand, thee I adore, O Lord !

7. OM to the *dhanus* [bow], propeller of the chief of weapons, destroyer of our enemies, defend us and bless us, O Lord !

8. OM to the *pasa* [noose], serpentine, venomous, unbearable to thine enemies, defend us and bless us, O Lord !

9. OM to the *ankas* [goad], lord of the elephant, for the defence of the world art thou placed in Parvati's hand, defend us and bless us, O Lord !

10. OM to the *sipar* [shield], oppose thy glories to the enemy in battle, and defend us, thy servants, and bless us, O Lord !

11. OM to the *ganta* [bell], striking terror by thy world-wide sound into our enemies, drive out from us all our iniquities, defend us and bless us, O Lord !

12. OM to the *parasu* [axe], the annihilator, victorious over all enemies, defend us and bless us, O Lord !

Siva, and Parvati in her more terrible forms, and all their demon train, are remains of the fetish religion of the aborigines of India, and are obviously intruders in the Hindu system.

The terrible twelve years' famine which wasted the Dakhan from 1396 to 1408, in the midst of which came Tamerlane and laid Hindustan waste, is personified by the natives as Durga Devi.

THE EIGHT VEDIC "DII SELECTI."

INDRA [Plate A, Fig. 4], in the Puranic mythology, takes, after the *tri-murti*, the first place before all other gods. He is worshipped at the beginning of every festival as one of the guardian deities of the world, and regent of the east quarter ; and his annual festival, on the 14th of the lunar month Bhadra [August-September], is celebrated with the greatest rejoicing

all over Bengal. Every person must keep his feast every year for fourteen years consecutively, and present him on each occasion with fourteen different fruits, fourteen kinds of cake, &c., as the giver of rain, and bestower of harvests, and for the purpose of procuring after death a residence in Indra's heaven, which is Swarga, on Mount Meru, the abode of the lesser gods and beatified men. His celestial city is called Amaravati, and his garden, Nandana, stretches far out along one of the northward spurs of Mount Meru. The most remarkable celebration of Indra is in the unsectarian festival known in the Madras Presidency as the *Pongol* [*i.e.* "boiling"], which corresponds in date with one of the festivals of Surya, known in other parts of India as *Makar Sankranti*. It is held on the day the sun enters the sign of the Makara [the *rahan*, or vehicle of Varuna, and ensign of Kama], on the first day of the month Magha [January-February], and is the greatest festival of the year in Southern India. It is admirably described by Mr. Charles E. Gover in vol. v. of the *Journal of the Royal Asiatic Society of England*, new series, 1871. That the festival is primitive is shewn by the fact that the Vedic deities alone are worshipped. Indra is the presiding deity, and Agni the main object of worship. The Brahmans of the Madras Presidency have constantly made efforts to corrupt the ritual, and introduce Puranic deities. Krishna is always declared by the Brahmans to be the Pongol god, but the rustic conservatism of the cultivators [pagans] has been able to resist their influence, and everywhere in Southern India Indra remains the king of the New Year festivities. Mr. Gover describes the *Pongol* as an annual house-warming, or ingathering of kith and kin, and harvest home combined; and as the Christmas and Whitsuntide of Europe made into one. Bonfires are everywhere lighted on the previous night, and the people gather from far and near around them, spending the time in laughing, talking, singing, and jumping through the flames, while they watch for the rising of the sun: and the moment it appears above the horizon the

Pongol begins. The first day is called the *Indra Pongol*, or *Bhogi-Pongol*, i.e. "rejoicing-boiling." The second day is the great day, and is called the *Surya* and *Agni Pongol*. This is the day for visiting friends, and the first salutation on entering a house is, "Has the milk boiled [*pongol*]?" to which the answer is, "Yes, it has boiled [*pongol*];" and from this the festival takes its name. The third day is the *Pongol* of cows, and altogether the festival lasts seven days. Indra is worshipped as the rain which caused the rice to spring, and Surya and Agni as the sun which ripened the new grain in the ear. Comfits are exchanged between all who meet, and enemies make up past quarrels, and creditors let off their debtors. No Brahman is ever present, and the *purohita*, or "man put forward," i.e. the family priest, is not a Brahman, but the father of the house, or the eldest son, as in Vedic times. In Bombay, the festival, which seems to be there connected more directly with *Surya*, the sun, and *Varuna*, the sea, than with *Indra*, has been completely Brahmanised, but still remains one of the simplest and most beautiful celebrations in the Hindu calendar. At the moment the sun enters the sign of the Makara, the people go down to the sea, accompanied by the Brahmans, to bathe. They rub their bodies with sesamum seed, the favorite seed of the sun [for the clear light the expressed oil gives], and wash themselves as directed by the Brahmans. Returning to their homes, they present each Brahman with a cup of bell metal filled with sesamum seed and money; in acknowledgment of which the Brahman gives them his benediction, pouring red-colored rice on their heads. Then all begin rejoicing; visiting each other, and feasting together all day long; and wherever friends meet, they put comfits of sesamum seed into each other's hands, saying, "Take, eat of these comfits of sesamum seed, and think of me kindly throughout the coming year." Even in Bombay, it is worthy of notice that throughout this day praise and prayer are offered only to the sun,

Surya, and to no other god. Again, on the celebration of the Hindu New Year's Day, on the 1st Chaitra [March-April], the standard of Indra is set up in front of every house in Bombay. It must be set up before every house, for on this day it is raised in his honour by the gods; and the will of the gods is to be done on earth even as it is in heaven; and so on this day the standard of Indra waves in every wind of the firmament all over India. Indra is represented as a white man, holding the thunderbolt [*vajra*] in his right hand, and riding on a white elephant with four trunks, named *Airavati* ["fine elephant"]. It is the rain-cloud. Indra's wife, Indrani, is mentioned in the Rig-Veda.

SURYA [Plate A, Fig. 2], the sun, is identical with SAVITRI, RAVI, and ADITYA, although these personifications are often distinguished from one another. He is the regent or guardian of the south-west quarter. He is generally represented as a ruddy man, seated on a lotus in a chariot drawn by either seven horses or a seven-headed horse, with the legless *Aruna* ["rosy," "red"] for his charioteer. He is surrounded by a halo of glorious light. In two hands he holds a water-lily; with the third he is forbidding fear, and with the fourth bestowing blessings. He is still widely worshipped in India, his sectaries being known as Sauras. He is also worshipped daily by the Brahmans, and especially on Sunday, which is called Aditwar or Raviwar after him; at the annual festival of the *Makar Sankranti*; and on his great day, the *Rathasaptami* kept in the month of Magha [January-February]. He has a temple dedicated to him at Baroda, in Gujarat, where he is known as *Surya Narayana*.

AGNI [Plate A, Fig. 1] is worshipped all over India for three days from the full moon of the month of Magha, when danger from fire is considerable; his image on these days being often addressed before that of Brahma. He is the guardian of the south-east quarter. He is represented as a ruddy, handsome young

man, with golden hair, riding on a blue ram, or blue he-goat. In his right hand he holds a spear, while his left rests by his side. He wears the Brahmanical *zenaar*, *poita*, or sacred cord, and a necklace of the seeds of the *Elæocarpus Ganitrus*. Sometimes he has three heads, and seven arms, and three legs, said [the legs] to be symbolical of the sun's creative heat, preserving light, and destroying fire, and [the arms] of the seven days of the week over which the sun rules. He thus in these Puranic representations coalesces with Surya. Mr. Gover observes that none of these images or pictures of Indra, Surya, and Agni are known in the Pongol festival, "any more than they were at the time when the hymns of the Rig-Veda were composed." In fact, at the Pongol, Indra, Surya, and Agni are still worshipped only in the form of the elements. There is a very interesting temple of Agni at Bombay, near the English burying-ground, in which all the sacrificial utensils are of wood.

VAYU, or PAVANA [Plates A, Fig. 5, and B, Fig. 1], the god of the winds and messenger of the gods, the regent also of the north-west quarter, is represented as a white man, clothed in blue, sitting on an antelope [which is associated also with *Soma* or *Chandra*], bearing an arrow in one hand, and a flag in the other. His image is never seen, but pictures of him occur in the illustrations of the Ramayana. He is often painted with his son Hanuman in his arms.

VARUNA [Plate B, Fig. 5] is, in the Puranic mythology, the god of the waters, and of the west quarter. His image is rarely seen, but he is worshipped daily as one of the guardian deities of the earth, and by those who farm the lakes in Bengal, and in times of drought and famine. In paintings he is represented as a white man seated on the sea-monster *Makara* [which is also the ensign of Kama], and holding in one hand a *pasa*, emblematical of the sea which girdles the earth, and in the other an umbrella, impenetrable to water, formed of a cobra's head. His favorite resort is Pushpagiri. The *Makara* is obviously a mythical crocodile. The annual festival of Varuna in Bombay is on the 15th

Sravana [July-August], known to Anglo-Indians as "Cocoanut Day." The rainy season is then supposed to be at an end, and the Indian Ocean again open to commerce, and the whole population in its joy gathers on the Esplanade, to cast cocoanuts into the calmed sea in honour of Varuna.

YAMA [Plate B, Fig. 4] is held in great terror by the Hindus, as the god of death and judgment, and is represented as a green or blue man, clothed in yellow or red, and seated on a blue buffalo. He is guardian of the south quarter; and an annual festival is held in his honour on the 2nd Kartika [October-November]. His sister is Yamuni.

KUVERA [Plate B, Figs. 2 and 3] is the chief of the demons of the lower world, but his own abode is in the grove of Chaitra-ratha, on Mandara, one of the spurs of Meru. But some place it on Mount Kailasa, and others identify Mandara with the mountain so named in Bhagalpur, which is held sacred. He is the regent of the north, and of all the treasures of the earth, and of the nine particular treasures or *nidhis*, the nature of which is not known. As the god of wealth he is worshipped in Bombay with Lakshmi during the *Diwali*, or Feast of Lanterns. He is represented as a white man deformed in his legs, either seated on the self-moving aerial chariot, called *Pushpaka*, which was given to him by Brahma, and which was carried off by Ravana, and recovered by Rama; or riding on a white horse. His wife is Kauveri.

SOMA [Plate A, Fig. 5], the last of the eight Vedic gods holding the first rank in the Hindu Pantheon, and regent of the north-east quarter, has his proper position after Ganesa and Karttikeya, the sons of Siva, who have next to be described; but here will be the most convenient place in which to insert the following table, chiefly taken from Dubois' *Description of the People of India*, 1817, giving a synoptical view of the eight Vedic gods who, according to the later mythology, preside over the four cardinal and four intermediate points of the compass.

TABLE OF THE REGENTS OF THE EIGHT QUARTERS OF THE
WORLD.

Names of the Gods.	Points which they guard.	Their Vahans, or Vehicles.	Attributes.	Colour of Clothing.
1. Indra	E.	White Elephant.	Vajra.	Red.
2. Agni	S.E. {	Blue Ram or blue he-Goat.	Sikhi.	Violet.
3. Yama	S.	Blue Buffalo.	Danda.	Orange.
4. Surya	S.W.	Chariot.	Padma.	Bright Yellow.
5. Varuna	W. {	The Makara [Crocodile].	Pasa.	White.
6. Vayu or Pavana	N.W. {	White Antelope.	Dwaja.	Blue or Indigo.
7. Kuvera	N. {	Aërial Car, or White Horse.	Khadga.	Rose colour.
8. Soma	N.E.	White Antelope.	Sankra.	White.

For No. 4 Dubois substitutes *Nirritu* [Plate B, Fig. 6], one of the Rudras, a personification of death, robed in deep yellow, and borne pick-a-back by a man; and for No. 8, Siva, as Isana. Sometimes Prithivi, the earth personified, fills the latter place.

THE TWO SONS OF SIVA.

GANESA, or GANAPATI [Plate I, Fig. 5], that is, lord [*isa* or *pati*] of the *Ganas* or troops of inferior deities, especially those attendant on Siva; called also in Madras *Puliar*, or the belly-god; the Hindu god of wisdom, the remover of difficulties, the Lar of the public ways, is the son of Siva and Parvati. His image stands in every house, and is painted on every Hindu schoolboy's slate, and he is invoked at the outset of every undertaking. His festival is celebrated on the third day of the month Bhadra [August-September], the anniversary of his birth, with unbounded fun in Bombay; but in Bengal no public festival is held in his honour. There is a celebrated temple to him at Bholeshwar, in the town of Bombay, and another at Pula, in the Ratnagiri collectorate. He is represented in the form of a short, fat, double-bellied man, with an elephant's head, and seated on a water-lily, or on the rat, which always accompanies

him. He has only one tusk, having lost the other in an encounter with Parasurama. He has four hands, in which he holds any four of the milder attributes of Siva. It appears that his mother, Parvati, was very proud of her boy Ganesa, and asked *Sani* [Saturn] to look at him, forgetful of the effect of his glance. Sani looked, and the child's head was charred to ashes, when his mother took off an elephant's and put it on him. Another story is that Siva in a fury cut the boy's head off, and then, in his remorse, stuck on the head of an elephant that was passing.

The *Gana-Devas*, or "troops of deities," of which he is the chief, are :—

- (1) The 12 Adityas.
- (2) The 10 Viswa-devas ["all the gods"].
- (3) The 8 Vasus.
- (4) The 12 or 30 Tushitas, identical with the Adityas, multiplied apparently to 30 to make up the days of the month.
- (5) The 49 Anilas, or "winds."
- (6) The 220 or 236 Maharajikas.
- (7) The 12 or 17 Sadhyas, or personified rites and prayers of the Vedas.
- (8) The 11 Rudras.

They all dwell together in Ganaparata, on Mount Kailasa, the Paradise of Siva.

KARTTIKEYA [Plate J, Fig. 1], identical with MANGALA and SUBRAHMANYA, the Hindu god of war, and regent of the planet Mars, is the son of Siva or Rudra, without the cooperation of a mother. He takes his name from his nurses, the seven *Krittikas*, or Pleiades. He is a yellow man [but, as Mars, he is painted red], and rides on a peacock, holding in his left hand an arrow, and in his right a bow. His chief temple in the Bombay Presidency is at Dharwar.

These thirteen gods head the roll of the greater celestial gods.

THE "PATRII PENATES" AND "LARES DOMESTICI ET FAMILIARES."

Next in order are the PRAJAPATIS, MANUS, and RISHIS, already named in the introductory paragraph to the present section on the Puranic gods, and the PITRIS, or ghosts of ancestral forefathers.

"THE HOSTS OF HEAVEN."

These are followed by the "hosts of heaven," the nine regents of the planets and eclipses.

RAVI, identical with Surya and Aditya, the regent of the Sun, who gives his name to the first day of the week, *Raviwar*, or *Aditwar*, our Sunday, the French *Dimanche*.

SOMA, or CHANDRA [Plate A, Fig. 3], the regent of the Moon, who gives his name to Monday, *Somwar*, the French *Lundi*. He is represented as a white man sitting on a water-lily, or in a chariot drawn by an antelope, or by ten horses, of the whiteness of jasmine.

MANGALA, identical with Karttikeya, the regent of the planet Mars, who gives his name to Tuesday, *Mangalwar*, the French *Mardi*. As Mars, he is painted red.

BUDHA, the regent of Mercury, the reputed author of a hymn in the Rig-Veda, who gives his name to Wednesday, *Budhwar*, the French *Mercredi*. He is represented robed in yellow, and sitting on a lion.

BRIHASPATI [the personification of the action of prayer in the Vedas], the regent of Jupiter, who gives his name to Thursday, *Brihaspatwar*, the French *Jeudi*: called also *Guruvār*, Brihaspati, or Brahmanaspati, being the prototype of the priestly *guru*, or religious teacher. He is represented as a yellow man, seated on a water-lily.

SUKRA, the regent of the planet Venus, who gives his name

to Friday, *Sukrawar*, the French Vendredi. He is represented as a white man seated on a water lily.

SANI, the regent of Saturn, who gives his name to Saturday, *Saniwar* or *Sanichar*, the French Samedi. He is represented as a black man, robed in black, and seated on a vulture.

RAHU is the ascending node in an eclipse, and is represented by the head of *Ketu*, placed on a cushion: or he is represented seated, whole, on a lion.

KETU is the descending node in an eclipse, and is represented by the headless trunk of Rahu riding on a vulture.

GRAHA ["grabbed"] is the eclipse itself.

The ninety-seven *Nakshatras*, or lunar mansions, are personified as the daughters of Daksha, one of the Prajapatis. *Dhruva* is the Pole-star, and the seven *Krittikas* are the Pleiades.

THE LESSER GODS, "DII MINORUM GENTIUM," AND DEIFIED HEROES, "DII INDIGETES."

KRISHNA ["black,"], [Plate H, Figs. 4 and 5], is the most celebrated national hero in the Hindu pantheon, and the mythical scenes and incidents of his life appear everywhere in Indian art. He was born at Mathura, the modern Muttra; his mother being Devaki, and his reputed father Vasudeva, of the Yadava race, and brother of Kunti, the wife of Pandu: but Vishnu is the mythical father of both Krishna and his brother Balarama. At the time of Krishna's birth, Kansa, Raja of the Bhojas, ruled in Mathura; and it having been foretold to Kansa that a son of Devaki, his brother's daughter, should take his kingdom from him, he kept her carefully guarded in his own palace, and caused all the children she bore to be put to death. In this way were six destroyed; but the seventh child was miraculously preserved by being transferred before its birth to the womb of Vasudeva's second wife Rohini, of whom it was in due time born. This child was Balarama. Devaki's eighth son was born at night, and was very dark, whence he was called Krishna, and had on his breast a curl of hair, the sacred sign of Krishna,

called *Sri-vatsa*. The gods at once interposed to save the divinely marked child, and while the guards who watched its mother were overpowered with sleep, Vasudeva carried it off to Nanda, the cowherd, whose wife, Yasoda, had on that very night been delivered of a female child; and Vasudeva secretly changed the infants, and brought back the daughter of Yasoda to Devaki. Kansa, on discovering the cheat, ordered that every male infant in and about Mathura should be put to death. Nanda, alarmed, hid himself with the young Krishna and his elder brother Balarama in Gokula, a pastoral district on the banks of the Yamuna near Mathura. It was while he lived in Gokula that Krishna played so many of his wild pranks. On one occasion while the *gopis*, or milkmaids, were bathing, he climbed up into a tree carrying their clothes with him, and would not descend until they came to him naked to beg their return. It was at this time also that he slew the great serpent *Kaliya*, which infested the banks of the Yamuna at Bandraband. He also persuaded Nanda, the cowherd, to give up the worship of Indra, and to worship the mountain of Govardhana, which sheltered the shepherds of Gokula and their cattle. Indra, enraged, poured down rain on them, but Krishna lifted up the mountain of Govardhana and held it over them upon his finger as a shelter for seven days. As he grew up a handsome youth, the *gopis* all became enamoured of him. He spent most of his time in sporting with them, and married seven or eight of them, but his first and favorite wife was Radha. His chief pastime was the circular dance called *rasa-mandala* [*mandala*, a circuit, as in Coromandel], in which he and Radha formed the centre, while the *gopis* and *gopias* [cowherds] danced round them. Kansa, always seeking his life, sent the demon Arishta in the form of a bull, and the demon Kesin in the form of a horse, to destroy him, but in vain. Then he invited Krishna to Mathura to some public games, hoping in this way to bring about his death, but Krishna slew him in a boxing-match. On this Krishna went down to the infernal regions, and brought back his

six brothers whom Kansa had killed; and then he killed the demon *Panchajana* who lived in the chank shell, which he ever afterward used as a war trumpet. Kansa had married two daughters of Jarasandha, king of Magadha [Bihar], and the latter, on hearing of Kansa's death, marched against Krishna, but was defeated. Next a new enemy named Kalayavana [literally "black stranger"] attacked Krishna, who, now feeling his position between Kalayavana and Jarasandha precarious, retired to Dwaraka, on the coast of Gujarat. Here he carried off Rukmini, the betrothed of Sisu-pala: and also recovered the famous jewel *Syamantaka*, which Jambavat, the king of the bears, had taken from a lion, which had killed a brother of Satrajita's who had charge of the jewel.

How he assisted the Pandavas in the great war of Bharata has already been told. The popularity of this national legend enabled the Brahmans to extend the worship of Krishna all over India, and it is now predominant everywhere, as the supreme cultus, except where the worship of Rama prevails. It seems to have passed over the whole length and breadth of the peninsula in an unbroken wave, which swept all before it; and it is illustrated by almost everything on which one looks in India. The anniversary of Krishna's birth is kept on the 8th Sravana [July-August], when the image of the infant Krishna is adorned with sacred basil; and the *Huli* festival, the great saturnalia of the vernal equinox in India, which begins at the new moon and continues to the full moon of Phalgana [February-March], is also now celebrated in his honour, and is the most popular holiday in Western India. It probably had its origin in the most primitive Aryan times. The ceremonies consist in enacting Krishna's sports with the *gopis*, and they often degenerate into great licentiousness. He is represented in many ways. As *GOPALA*, or *GOVINDA*, and *BALA-KRISHNA*, he is a child, resting on one knee, with his right hand extended, begging for sweetmeats. At a later period of life he is represented either trampling on the head of

the great serpent Kaliya, or playing on a flute. The representations of him in painting and sculpture, dancing with the *gopis*, or raising the mountain of Govardhana, or in connexion with the Pandavas, are endless. In the Madras Presidency it would appear to be always Krishna who is represented under the form of Vishnu. His most famous form is as JAGAN-NATHA, "Lord of the World," under which he is worshipped, in association with his brother Balarama, and his sister Subhadra, at Puri, near Cuttack, in Orissa. This image has no legs and only stumps for arms, and its head is very large. Krishna, it will be remembered, was accidentally killed at Dwaraka : and the story at Puri is that some pious person collected his bones, and put them in a box, in which they remained until King Indradyumna was directed by Vishnu to make an image of Jagan-natha, and put Krishna's bones into its belly. Viswakarma, the architect of the gods, undertook to do this, on condition that he should be left undisturbed until the completion of the work. But the king after fifteen days, losing all patience, went to see how he was getting on, when Viswakarma at once went off in a huff, leaving Jagan-natha without hands or feet. Such is the explanation given by the Brahmans of this hideous idol. The true one is General Cunningham's, who has proved that the image has been concocted of the *trisula* of a Buddhist tope, which was erected at Puri B.C. 250. Before this monstrous shrine all distinctions of caste are forgotten, and even a Christian may sit down and eat with a Brahman. In his work on *Orissa*, Dr. W. W. Hunter says that at the "Sacrament of the Holy Food" he has seen a Puri priest receive his food from a Christian's hand. This rite is evidently also a survival of Buddhism. It is remarkable that at the shrine of *Vyankoba*, an obscure form of Siva, at Pandharpur, in the Southern Maratha country, caste is also in abeyance, all men being deemed equal in its presence. Food is daily sent as a gift from the idol to persons of any importance in all parts of the surrounding country, and the proudest Brahmans will gladly accept and partake of it from the

hands of the Sudra, or Mahar, who is usually its bearer. There are two great annual festivals in honour of Jagan-natha, namely, the *Suan-yatra* in the month Jyestha [May-June], and the *Rath-yatra* in the following month of Asarha [June-July]. They are held everywhere, but at Puri they are attended by pilgrims from every part of India, so many as 200,000 often being present. All the ground is holy within twenty miles of the temple, and the establishment of priests amounts to 3,000. The "Sacrament of the Holy Food" is celebrated three times a day, and during its administration the temple nautch girls [*Devadasi*] dance before the image. The *Suan-yatra* is a bathing festival. At the *Rath-yatra*, the temple car, containing the images of Krishna, Balarama, and Subhadra, is drawn by the devotees through the town, when many cast themselves beneath its ponderous wheels and are crushed to death. Haridwara or Hurdwar, "the Gate of Hari," near where the Ganges breaks through the Himalayas, is a great centre of the worship of Krishna as an incarnation of Vishnu, under his name of Hari. Hurihud is also called after him. Harihar would seem to be sacred to both Krishna as Hari and Siva as Hara. At Dwaraka [Dwarka], in Kathiwar, Krishna, in his form of Dwarkanatha, and his eight wives, have each separate temples, of great fame throughout all India, and most Hindus who visit them are branded with the attributes of Vishnu, the *sankha* [shell], *chakra* [wheel], *gadha* [mace], and *padma* [lotus-flower], in token of their visit to the place.

BALARAMA [Plate G, Fig. 3] is always represented as a white man.

RAMA-CHANDRA [Plates G, Fig. 1, and I, Fig. 2], the husband of SITA, the hero of the Ramayana, is always known in the scenes in which he appears by his bow and arrow. His worship is predominant throughout Oude, and there are temples to him all over India. The anniversary of his birth is everywhere celebrated from the 1st to 9th Chaitra [March-April], by the public reading of the Ramayana. Several cities are called Rampura after

him. He gives his name to Rama-giri, the "hill of Rama," a short distance north of Nagpur; to Rama-situ, "Rama's bridge," the line of rocks between India and Ceylon; and to Rameswaram, where he is said to have set up one of the twelve great *lingas* to Iswara, the "lord" Siva. The *Zemindar* of Ramnad still bears the title of *S'tu-Pati*, or "keeper of the bridge," *i.e.* of Rama's bridge. The salutation of two Hindus meeting each other is "Ram Ram," but whether it has any connexion with Rama-Chandra, as is sometimes said, is doubtful. He has a temple celebrated throughout Western India at Panchawati [*i.e.* "five-banyans," just as we have Seven-Oaks, Nine-Elms], near Nasik, where it was that, on his way to Lanka, he killed the golden deer. It is overshadowed by five magnificent banyan-trees.

THE "DII SEMONES."¹

VISWAKARMA, the omnificent, the architect of the gods, is little more than a name in the popular mythology of India.

KAMA, or KAMA-DEVA [Plate I, Fig. 6], the god of love, the son of Lakshmi, is the Indian Cupid. He is represented, like Cupid, as a young boy with wings, and a bow and arrow; and he rides either on the *Makara* or a red parrot or lory. When the latter is his *vahan*, he bears the *Makara* as his ensign. His wife is RATI, surnamed SUBHANGI, the "fair-limbed," and, like Lakshmi and Rambha, is a sort of the Hindu Venus.

ANANDA is happiness, and

VASANTA is the spring personified.

There are a number of other personifications belonging to the order of the lesser gods, which are little more than appellatives, and seldom met with except in poetry or religious writings; such as *Sanjna*, conscience, *Papa-purusha*, the fat man, "man of sin," the personifications of human wickedness; *A-dharma* ["un-righteousness"] vice, *Yajna*, "sacrifice," represented as the

¹ Semones = semi-homines. Cf. Livy, viii. 20: "Minores diis, et majores hominibus."

husband of *Dakshina*, the personification of the "honorarium" paid to Brahmans for the performance of a sacrifice; *Nidra*, sleep; the fifty personifications of the fifty letters of the alphabet; and others, to enumerate which might give some colour to the Puranic boast of the Hindu gods numbering 330,000,000. A much more important class of the lesser gods are the fabulous animals of which Hanuman, Garuda, and Sesha are the types.

HANUMAN [Plate I, Fig. 3], the monkey-god, the son of Vayu or Pavana, was the leader of the army which Sugriva, the monkey-king of Kishkindhya, sent to the assistance of Rama against Ravana, the demon-king of Lanka [Ceylon], and the Rakshasas. He jumped from India to Ceylon at a bound. *Surasa*, a Rakshasi, mother of the *Nagas* [literally "snakes," and also "hillmen," the Scythic worshippers of the cobra], opened her mouth to swallow him bodily, but he swelled himself out wider than ever she could stretch her mouth, till it was a hundred leagues wide from ear to ear. Then Hanuman, suddenly shrinking himself to the size of his thumb, lept into her jaws, and out through her ear. These exploits of his are the delight of the native nurseries of all India. He is always known by his ape's face and tail. *Sarabha* was another of Rama's monkey allies.

Jambavat, the king of the bears, was also an ally of Rama's, and always acted the part of a sage counsellor. Like Hanuman, he is evidently a mythical representative of tribes who assisted the Brahmanical Hindus in the conquest of Southern India and Ceylon. He is the same as the bear with whom Krishna had his twenty-one days' fight for the recovery of the famous gem *Syamantaka*, which was given to the sun by Satrajita. He is at once recognised in illustrations of the stories of the Ramayana.

Kamadenhu, called also *Surabhi*, is the cow of plenty, which grants all desires, and was produced at the churning of the ocean by Vishnu.

Uchchaih-sravas is the eight-headed king of horses, produced at the churning of the ocean.

Kalki, or *Kalkin*, is the great white horse of Vishnu's coming [10th] incarnation, which will stamp with its right fore leg as the sign of the end of all things. In his first, second, third, and fourth avatars Vishnu also appears respectively as a fish [*Matsya*], tortoise [*Kurma*], boar [*Varaha*], and man-lion [*Nara-Sinha*].

Tarkshya is the winged horse, personifying the sun. The winged horse of the sculptures of Buddha-Gaya [Plate K, Fig. 6] may possibly be *Tarkshya*, as the *Kinnaras* are also represented, but it is probably of foreign origin [Pegasus].

The *Kinnaras* are mythical beings, with the body of a man and head of a horse, which belong to another order of the Puranic gods. The Centaurs are represented in the sculptures of Buddha Gaya [Plate K, Fig. 5], but are obviously exotic forms.

Sarama is the dog of Indra, and the *Sarameyas*, her offspring, the watch-dogs of Yama. *Cerbura* [Plate K, Fig. 2] is the three-headed infernal dog of the Krishna legends.

THE VAHANS, OR VEHICLES OF THE DIFFERENT GODS.

The Bull, *NANDI*, the vehicle of Siva and Parvati.

The Tiger, and Lion, also vehicles of Parvati, as Kali, and Durga.

The Dog, and Horse, the vehicles of Siva as Bhairava; the Horse also of Kuvera.

The Ram, or he-Goat, the vehicle of Agni.

The Antelope, the vehicle of Vayu, or Pavana, and Chandra.

The Buffalo, the vehicle of Yama.

The Elephant *Airavata*, the vehicle of Indra. Sometimes all the guardians of the eight points of the compass are represented on elephants.

Arva, one of the horses of the moon, a mythical being half horse and half bird like *Tarkshya*, the vehicle of the Daityas or Titans.

GARUDA [Plate J, Fig. 2], the king of the birds, the mythical

being foreshadowed by *Arva* and *Tarkshya*, half man and half eagle or vulture, the vehicle of Vishnu, and represented as a great enemy of the *Nagas*. He is uncle of the pious old vulture *Jatyus*, and connected with *Sampati*, and other fabulous birds, included in the class named *Suparnas* ["five-winged"]. *Chakora* is a fabulous bird which lives on the beams of the moon. The bird like a Harpy represented on the sculptures of Buddha Gaya [Plate K, Fig. 3] is probably of foreign origin.

The Vulture, the vehicle of Sani.

The Swan or Goose, *Hansa*, the vehicle of Saraswati and Brahma. Sometimes Saraswati is represented on a white Peacock, and sometimes on a Paddy-bird. The Peacock on which Kartikeya sometimes rides is called *Paravani* [Pavo].

The Parrot, the usual vehicle of Kama-deva.

The *Makara* or *Jalampa*, the mythical sea-monster, the vehicle of Varuna and sometimes of Kama-deva. When the latter rides on a Parrot, he bears the *Makara* as his standard. Very learned discussions have been held as to the nature of the *Makara*, but it is obviously a crocodile, tricked out with the tail of a fish, and the head and paws of anything.

The Serpent *Sesha-Naga* [Plate D, Fig. 1], called also *Ananta*, the Infinite, the king of the *Nagas* or serpents, and lord of the infernal regions, called *Patala*, may also be regarded as a vehicle of Vishnu, but more properly belongs to the class of demons. He is sometimes held to be identical with, and sometimes distinct from, *Vasuki*, the snake with which Krishna churned the ocean. The *Nagnis*, or female *Nagas*, are represented with the body of a woman ending in the tail of a snake [Plate J, Fig. 3], like as sin is represented by Milton. *Timin* is the veritable sea-serpent. *Timin-gila*, the "swallower of Timin," is yet larger, and *Timin-gila-gila* still larger, and so on, just as the "sea-serpent" grows from year to year in the columns of our newspapers. It is also called *Samudraru*, "Lord of the Sea" ["Zamorin"].

Akupara is the Tortoise on which the earth rests.

CELESTIAL ATTENDANTS ON THE GODS.

The celestial attendants on the gods are classed in *ganas* or troops. The *Apsaras* [Plate J, Fig. 5], the personifications of vapour in the Vedas, are, in the Puranas, the ballet girls, and "sisters of mercy" of Swarga, the Paradise of Indra; beautiful fairy-like beings, whose charms are

"The common treasure of the host of Heaven,"

Rambha and Urvashi being the most celebrated of them. The *Gandharvas*, "the heavenly Gardharvas" of the Vedas, are the celestial choristers of Swarga, whose leader is Narada. They are said to have a great partiality for women, and a mystic power over them. They are always associated with the *Apsaras*.

The *Kinnaras* are the minstrels of Kuvera's paradise on Mount Kailasa, which is also Siva's heaven. They have the heads of horses. The *Yakshas* are inoffensive attendants of Kuvera, and the *Guhyakas* ["hidden beings"], the guardians of his treasures. The *Siddhas* are a class of spirits of great purity and holiness, who are not, strictly speaking, companions of the god, as they dwell apart, in the sky or mid-air, between earth and heaven.

THE INFERNAL ATTENDANTS ON THE GODS.

The chief inferior infernal deities are :

NIRRITU ["death," Plate B, Fig. 6], one of the Rudras, also described as a Rakshasa, and often named, in the place of Surya, as the guardian of the south-west quarter. He is robed in deep yellow, and his vehicle is a man. He is referred to in the Rig-Veda as worshipped by the "spider-like Danavas," the "black Asuras," the "black Dasyus," and other enemies of "the white-complexioned sons of Indra."

The *Rakshasas*, goblins or evil spirits, are a mythical type of

the rude races of India subdued by the Aryas. RAVANA [Plate I, Fig. 4], the demon king of Lanka, and *Viradha* are the most celebrated. The *Asuras*, the *Danavas*, or giants, and the *Daiityas*, or Titans, who warred against the gods, are also types of the primitive barbarian peoples of India.

The *Nagas* are a mythical type of the Scythic race of snake-worshippers, which in ancient times was spread all over India, and is now represented by the *Nagas* of Manipur. The worship of snakes still survives everywhere in India, and at Nagpur was, until very recently, a public danger, from the manner in which the city was allowed to be overrun with cobras. Battisa Siralen, a town in the Satara collectorate, is also famous as a place of serpent-worship at the present day; and the whole of the Canarese country is devoted to it. The most celebrated temple dedicated to it is at Bhomaparanden in the Nizam's Dominion. The *Nagas* are said to have first invaded India between B.C. 700 and 600. They are probably allied to the Scandinavians, which would account for the traces of snake-worship to be found in Northern Europe. In Miss Gordon Cumming's *From the Hebrides to the Himalayas*, 1876, many most interesting facts are recorded of snake-worship in Scotland and India.

SESHA NAGA, or ANANTA, "eternity," [Plate D, Fig. 1], is the king of the *Nagas*, often identified with VAMUKI, who is also called the King of the *Nagas*: but the historical King of the *Nagas* is probably Vamuki, Sessa being an allegorical personification. KALIYA was the great snake slain by Krishna in a deep pool of the Yumuna, near Bindraband [Vrindavana]. All these snakes are worshipped in great state every year at the *Nagpanchami* festival held on the 5th Sravana [July-August].

The *Bhutas*, or ghosts, are attendants of Siva.

The female imps, known as *Dakinis*, or *Asrapas* ["blood-suckers"], and *Sakinis*, and the eight sorceresses called *Yoginis*, are attendants of Parvati, as Kali or Durga. They are specially worshipped in Bombay on the 30th Sravana [July-August].

The *Naikasheyas* and *Pisitasanas* are cannibal imps descended from *Nikasha*, the mother of Ravana.

RAVANA [Plate I, Fig. 4] was the demon king of Lanka, [Ceylon] from which he expelled his half-brother *Kuvera*; and was in turn overthrown by Rama.

BALI was the usurping monkey-king of Kiskhindhya, who was slain by Rama. He was the brother of Sugriva, the friend and ally of Rama. He must be distinguished from Bali, the good and virtuous Daitya king, to suppress whom Vishnu became manifest in his dwarf *avatara*.

VITAL is a demon king whose worship prevails in the mountain state of Sawantwadi, in the Bombay Presidency, and the legends of him as the familiar and friend of the great Vikramaditya are widely known under the name of *Vital-Pachisi*, or *Baital-Pachisi* ["twenty-five tales of Vital"]; of eleven of which a capital version, entitled "*Vikram and the Vampire*," was published by Captain Richard Burton in 1870.

Before the worship of any other deity, it is necessary that the worship of the following deities, already described, should be first performed, namely:

- (1) Indra, Agni, Yama, Nirritu, Varuna, Pavana, Isa [Siva], Ananta, Kuvera, and Brahma;
- (2) Surya, Ganesa, Siva, Durga, and Vishnu;
- (3) Ravi, Soma, Mangala, Budha, Brihaspati, Sukra, Sani, Rahu, and Ketu.

LOCAL DEITIES.

Besides the above deities, local deities are also everywhere worshipped all over India. As they are seldom represented in Indian art, nothing more need be said of them here, although these often formless stocks and stones are deeply interesting as

illustrating the genesis of the Turanian gods of the Puranic pantheon. They gradually become assimilated to some one or other of the officinal gods, generally Siva or Vishnu, and their *saktis*.

MISCELLANEOUS SACRED OBJECTS.

Sacred Stones.

Certain stones also are held in the highest worship, the chief of them being the *Salagrama*, which is sacred to, and indeed identified with, Vishnu. It is a fossil ammonite found in the river Gandak in Nipal. The *Binlang*, a reddish stone found in the Narmada [Nerbudda], and the *Chandra Kanta* or moon-stone, and *Surya Kanta*, literally "sun-stone" [opal?], are also revered as respectively representing Ganesa, Chandra, and Surya. But the *Saligrama* is the only stone deriving its deity from itself, and all other stones worshipped are made sacred by incantation.

SACRED TREES AND PLANTS.

The following are the principal sacred trees of India. I am indebted for this list, first published in my *Catalogue of the Vegetable Productions of Bombay*, 1862, to the Honorable Rao Sahib, Wishwanath Narayan Mandlik, member of the Legislative Council of Bombay, and my friend the late Dr. Bhau Daji, of Bombay.

Sacred to the Trimurti.

Ægle Marmelos, *sri-phala*, } *bel*, *vilva*.
Cratæva religiosa,

Sacred to Siva.

Ægle Marmelos, *sri-phala*, } *bel*, *vilva*.
Cratæva religiosa,

Saraca Indica [Jonesia Asoca], *asoca*.
Cæsalpinia pulcherrima, an exotic.
Zizyphus Jujuba, *kula*, *bore*.
Jasminum Sambac, *mallika*.
Tabernæmontana coronaria, *tagara*.
Sesbania grandiflora, *agasta*.
Mimusops Elengi, *kesara*.
Mallotus Philippinensis, *punnaga*.
Gardenia florida, *gundaharaja*.
Michelia Champaca, *champaka*.
Anthocephalus [Nauclea] *Cadamba*, *kadamba*.
Shorea robusta, *sala*.
Ficus religiosa, *aswattha*, *pipal*.
Ficus Benghalensis, *war*, *vata*.
Feronia elephantum, *kapittha*.
Elæocarpus Ganitrus, *radraksha*.
 And many others.

Sacred to Siva and Vishnu.

Jasminum undulatum.
Guettarda speciosa.
Mesua ferrea, *naga-keshara*.
Origanum Marjoram, *marwa*.
Ixora Bhanduca, *bhanduca*, *ranjun*.
Artemisia sp., *downa*.
Nerium odorum, *kuruvira*.
Chrysanthemum indicum, *chandra-malika*, *seunti* or *seventi*.

Sacred to Vishnu.

Ocymum sanctum, *tulsi*.

Sacred to Lakshmi.

Nelumbium speciosum, *kamala*.

Sacred to Parvati.

Ægle Marmelos, sri-phala, bel, vilva.
Phyllanthus Emblica, anola, aonla, amalī.

Sacred to Kama-Deva.

Mesua ferrea, naga-keshara.
Pandanus odoratissimus, keura.
Mangifera indica, amba.
Michelia Champaca, champaca.
Pavonia odorata, bala.

Plants sacred to "the Hosts of Heaven."

To *Ravi* or *Surya*, *Hibiscus Rosa-Sinensis, jawā*; and
Calotropis gigantea, ak.
 To *Soma* or *Chandra*, *Butea frondosa, palasa*; and
Nymphaea Lotus, kamala.
 To *Mangala*, or *Karttikeya*, *Acacia Catechu, khadira.*
 To *Budha*, *Achyranthes aspera, apamorga.*
 To *Brihaspati*, *Ficus religiosa, aswattha, pipal.*
 To *Sukra*, *Ficus glomerata, adambara.*
 To *Sani*, *Prosopis spicigera, shami.*
 To *Rahu*, *Cynodon Dactylon, durva, dub.*
 To *Ketu*, *Poa cynosuroides, kusa.*

Plants sacred to the Patricas, or Nine Forms of Kali.

To *Rhamba*, *Musa paradisiaca, kaila, kadali.*
 To *Kachwi-rupa*, *Arum esculentum, kachwi.*
 To *Haridra*, *Curcuma longa, haridra.*
 To *Jayanti*, *Sesbania Ægyptiaca, jayanti.*
 To *Vilva-rupa*, *Ægle Marmelos, bel, vilva, sri-phala.*
 To *Daremi*, *Punica Granatum, darima.*
 To *Asoka*, *Saraca Indica [Jonesia Asoca], asoka.*
 To *Manaka*, *Alocasia macrorrhizon, mana.*
 To *Dhanya*, *Coriandrum sativum, dhanya.*

The following plants receive special worship :

Ocymum sanctum, *tulsi* [sacred basil], daily.

Melia Azadirachta, *nimba*.

Bauhinia racemosa, *vana-raja* or *apata*, and *apta*
at the Durga puja, or Dusera.

Acacia Catechu, *khair*, *khadira*.

Prosopis spicigera, *shami*.

Ficus religiosa, *aswattha*, *pipal*, on the 30th of
each month, when it falls on a Monday.

Ficus Bengalensis, *vata*, *war* [the banyan], on the
12th Jyestha [May-June].

Musa paradisiaca, *kaila*, *kadali* [plaintain], on
the 3rd Sravana [July-August].

Phyllanthus Emblica, *aonla* or *amali*, on the
12th Kartika [October-November]

Adansonia digitata, *gorakhachincha* [horse tamarind], on the 11th of the dark half of Chaitra
[March-April].

The following are the common sacrificial woods of the Hindus
in Bombay :

Butea frondosa, *palasa*.

Prosopis spicigera, *shami*.

Calotropis gigantea, *ak*.

Achyranthes aspera, *apamorga agarch*.

Ficus glomerata, *umbar*, *adambara*.

Ficus Bengalensis, *vata*, *war*.

Ficus religiosa, *aswattha pipal*.

Cynodon Dactylon, *durva dub*.

Poa cynosuroides, *kusa*.

The five leaves used for pouring libations in Bombay, and as
platters, are those of—

Mangifera indica, *amba*.

Eugenia Jambolana, *jambul*.

Ficus Benghalensis, war.

Ficus cordifolia, guya-aswattha.

Ficus religiosa, aswattha pipal.

Roadside Trees.

The planting of great trees along the highways, and of groves for halting-places, has from the most ancient times been a popular custom in India, to the great solace of wayfarers; and the Brahmans feign that he who plants a tree lives long. The trees principally planted are :

Ficus religiosa, aswattha, pipal.

Ficus Benghalensis, vata, war.

Ægle Marmelos, vilva, bel, sri-phala.

Saraca indica [Jonesia Asoca], asoka.

Mimusops Elengi, vakula, kesara.

Ficus infectoria, plucsha.

Ficus glomerata, adambara.

Dalbergia Sissoo, shingshupa.

Melia Azadirachta, nimba.

Michelia Champaca, champaka.

Mesua ferrea, nagkeshara.

Borassus flabelliformis, tala.

Cocos nucifera, narikela.

The Brahmans promise that he who plants 1 *aswattha* or *pipal*, 2 *champakas*, 3 *nagkesharas*, 7 *talas*, and 12 *narikelas*, and devotes them with their shade, leaves, flowers, and fruit to public use, shall certainly inherit the kingdom of heaven.

Forbidden Plants.

Some flowers are forbidden to be offered to the gods. The Tantric or Yantric flowers, used, on account of their fancied symbolism, in *sakti* worship, such as the *Clitoria ternatea*, *Sesbania*

grandiflora, and *Hibiscus Rosa-Sinensis*, are never offered to Vishnu. But the flowers of *Mimusops Elengi*, although held to be Yantric, may be offered to Vishnu; and the Yantric flowers of the *Nerium odorum*, or oleander, and *Nelumbium speciosum*, or sacred lotus, may be offered to all the gods. The *Hibiscus Rosa-Sinensis*, *Murraya exotica*, *Nyctanthes Arbor-Tristis*, and some other species of jasmine, are never offered to Siva; and the *Ocymum sanctum* may be offered only to Vishnu.

The following plants are frequently mentioned in the Vedas :

Sarcostemma viminalis, *soma*, *homa*.
Bombax heptaphyllum, *shalmali*.
Butea frondosa, *palasa*.
Acacia Catechu, *kadira*.
Prosopis spicigera, *shami*.
Ficus religiosa, *aswattha*, *pipal*.
Cynodon Dactylon, *durva*.
Poa cynosuroides, *kusa*.

The following trees are found represented in the ancient Buddhist sculptures of India :

Musa paradisiaca, *kaila*, *kadali*.
Bambusa arundinacea, *bansh*.
Triticum variety, wheat.
Nelumbium speciosum, *kamala*.
Mangifera indica, *amba*.
Bignonia suaveolens, *parul*.
Shorea robusta, *sala*.
Eugenia Jambolana, *jambul*.
Acacia Lebbek, *siris*.
Bauhinia variegata, *kovidara*.
Artocarpus integrifolia, the jack, including the forms which I formerly identified with *Anona squamosa*, the custard-apple, *sita-phal*.

Ficus religiosa, *aswattha*, *pipal*.
Ficus Benghalensis, *vata*, *war*.
Ficus glomerata, *umbar*, *adambara*,
Borassus flabelliformis, *tala*, *tar*.
Phoenix sylvestris, *kajur*.

SACRED ANIMALS.

All the animals, which are the *vahans* or vehicles of the gods, are sacred, namely the antelope, bull, buffalo, dog, goat, elephant, lion, peacock, rat, serpent, tiger, &c.; also the jackal in some parts, as an incarnation of Parvati or Durga. And above all the cow. Brahma is said to have created the Brahmans and the cow at the same time; the Brahmans to offer the sacrifices, and the cow to yield the ghee or clarified butter for kindling them. The eating of ghee destroys all sin; and the eating of the five products of the cow cleanses from all pollution. The dung of the cow is universally used for spreading over floors and walls on "scrubbing days," and, strange to say, it has the effect of a scrubbing on them, cleansing them perfectly, and giving a room the fragrance of the Tonquin bean. How would Dr. Richardson explain it?

SACRED MEN.

The Brahmans are objects of worship; as is also the Rana of Udaipur, the representative of the Solar Race or *Surya-Vansa*. In later times, long after the age of Rama Chandra, the kingdom of Ayodhya merged in that of Kanouj. Afterwards a second dynasty was established at Vallabi, and when, A.D. 524-579, Naushirvan, the famous Sassanian king of Persia, drove the last of the Vallabis out of Gujarat, the Vallabi Prince Goha was married to the daughter of Naushirvan. She was granddaughter of Maurice, Emperor of Constantinople, and from her are

descended the present Ranas of Udaipur, who thus, according to the genealogists, represent at once the legendary hero of the Ramayana, the Sassanian kings of Persia, and the Cæsars of Rome. The Ranas are always represented in their portraits with the aureole round their heads.

Ganesa was supposed to be hereditary for seven generations in the family of a *gosain*, named Muraba, near Poona; and the last inheritor of his godship died within the recollection of many persons now living in the Maratha country. Krishna is held to be incarnated in every Maharaja or high-priest of the Vaishnava sect of *Vallabhacharya*. Their first tenet is that God is only truly served by the absolute prostitution of themselves in body, soul, and property [*"tan, man, dhan"*]¹ to their priests; and the *rasa-mandala*, or circular dance of Krishna, performed in the dark room, is their most solemn sacrament.

MISCELLANEOUS SACRED THINGS.

The Vedas also are deified; so are the Itihasas and Puranas. I have known Roxburgh's *Coromandel Flora* and Wallich's *Plantæ Asiaticæ Rariores* to be worshipped; and it is difficult indeed to say what the Hindus will not worship. Every kind of implement used in earning a livelihood is sacred, and adored at stated periods, particularly the ploughshare, the weaver's loom, and the potter's wheel. Everything which is or resembles an attribute of the gods becomes an object of reverence and worship. In every prominence Siva is seen, in every depression Vishnu, Krishna, and the *Matris* or "divine mothers," the *prakritis* or *saktis* of the gods.

¹ See Sir Bartle Frere's paper, *The Banians*, in *Macmillan's Magazine*, October, 1875.

SACRED PLACES.

All rivers are sacred; and the rivers Ganges [Ganga], Nerbudda [Narmuda], are specially sacred. One of the holiest spots on the Ganges, and indeed in India, is the place where the Jumna [Yamuna], and sacred Ganges, and mystic Saraswati, which is supposed to join them by an underground passage, meet at Allahabad, called by the Hindus *Prayaga*, or "the confluence," and *Triveni*, or "the triple braid." It is personified by a fish bearing on its back three goddesses. [Plate J, Fig. 4.] The place of junction of two rivers is called *Sangam*, of which there is a familiar illustration in the junction of the *Muta* and *Mula*, near Poona.

The seven sacred Indian cities, a visit to which confers eternal happiness, are, 1, Ayodhya [Oudh], the city of Rama; 2, Mathura [Mutra], the city of Krishna; 3, Maya [Buddha Gaya], the City of Illusion; 4, Kasi [Benares], the city of Siva as Visweswara; 5, Kanchi [Conjeveram]; 6, Avanti, or Avantika [Ujjayini]; and 7, Dwaraka, or Dwaravati [*i.e.* "doors of wind"]. Go Karna ["cow's ear"], near Mangalore, Rameswaram, and Somnath Pattan, all having celebrated temples of Siva, are also sacred cities. Ganga-Sagara is a holy bathing place, sacred to Vishnu, at the mouth of the Ganges.

SACRED MOUNTAINS.

All mountains are sacred. Jwala-Mukhi, "mouth of fire," a volcano in the Lower Himalayas north of the Panjab, where fire issues from the ground, is a celebrated place of pilgrimage. According to the legend it is the fire which *Sati*, the wife of Siva, created, and in which she burned herself. Govardhana, near Muttra, is sacred to Krishna; and hid in the depths of the Himalayas [Himmel] is Mount Meru, the abode of all the gods.

OF MOUNT MERU AND MOUNT KAILASA, THE HINDU OLYMPUS.

In the Hindu cosmogony the world is likened to a lotus-flower floating in the centre of a shallow circular vessel, which has for its stalk an elephant, and for its pedestal a tortoise. The seven petals of the lotus flower represent the *sapta dwipas*, or seven divisions of the world as known to the ancient Hindus, and the tabular torus, which rises from their centre, represents Mount Meru, the ideal Himalayas [Himmel], the Hindu Olympus. It is not only a simple and artistic conception of the geographical distribution of the countries of the old world, but quite rational; for the old world is all one continent, having its culminating point in the Himalayas, round which the peninsulas of India and Further India, Arabia, Assyria, Asia Minor, Africa, and Europe, lie extended like the petals of a lotus flower round its torus. India is *Jambu-dwipa*, the peninsula of myrtle blooms; and it is from the forest of Gandhamadana, which forms a belt of most delightful fragrance round its base, that Mount Meru gradually rises from the earth, through the sky or mid-air, into heaven. It ascends by seven spurs, on which the seven separate cities and palaces of the gods are built amid green woods and murmuring streams, in seven circles placed one above another. On the eastern spur is Swarga, with its stately city of Amaravati, the heaven of Indra. There also is the ærial city of the Gandharvas, Vismapana, "the astounding," which appears and disappears at intervals, like the sound of music heard in air; and the tree Parajita, the delight of the lovely Apsaras, which perfumes the whole world with its blossoms, each of 1,000 petals. Northward, on the Mandana spur, amid the glades of the Chaitra-Ratha forest, rises Mount Kailasa [caelus], the heaven of Kuvera, which is also Siva's heaven, and Ganesa's. There is Kuvera's ærial car of jewelled lapislazuli, and Siva's throne of fervent gold. Westward, on Mount Suparswa, in the groves of Vaibhaja, is Vaikuntha,

the paradise of Vishnu; and over all, on the summit of Meru, is Brahmapura, the entranced city of Brahma, encompassed by the sources of the sacred Ganges, and the orbits in which for ever shine the sun, and silver moon, and seven planetary spheres. Beneath Mount Meru are the seven circles [inhabited by the Nagas, Danavas, Rakshasas, and others] of Patala, the Hindu hell, where in the seventh or lowermost circle is Bhogavati or Put-Kari, the voluptuous subterranean capital of the Nagas, where reigns Vasuki, or Shesha-Naga [Ananta], in great majesty and power. He upholds Mount Meru, and the seven *dwipas* on his sevenfold head. When he yawns, the world is shaken by earthquakes, and when at the end of each *kalpa* he uncoils his mighty folds, the whole creation topples down, and passes away like a scroll in the blasts of fire he belches forth from his mouths.

Narada, the leader of the Gandharvas, who once paid a visit to these infernal regions, on returning to his native skies, gave a most glowing account of them, declaring them to exceed in glory and delight even the splendours and gracious pleasures of the heaven of Indra.

THE HINDU SECTS AND SECTARIAL MARKS.

The innumerable sects of the Hindus all merge into one or other of the five following :

1. The Saivas, who worship Siva and Parvati conjointly.
2. The Vaishnavas, who worship Vishnu.
3. The Sauras, who worship Surya, the Sun.
4. The Ganapatias, who worship Ganesa.
5. The Saktas, who worship the *sakti* or female energy of Siva.

The fourth sect, the Ganapatias, and the fifth, the Saktas, are ramifications of the first, the Saivas, who may thus be subdivided into :

- (a) Saivas proper, who worship the *linga-yoni* symbol.
- (b) Lingaits, who worship Siva in his *linga*, or phallic form.
- (c) Saktas, adorers of the *yoni* or female form of Siva.
- (d) Ganapatias, adorers of Siva's son Ganesa.

The second sect, the Vaishnavas, may be subdivided into :

- (a) The Gokulas, the worshippers of Vishnu as Krishna, who adore either Krishna exclusively, or Radha exclusively, or Krishna and Radha conjoined.
- (b) The Ramanuj, or worshippers of Rama-Chandra ; who likewise are divided into the worshippers of Rama only, of Sita only, and of Rama and Sita conjoined.

The Saktas, or exclusive adorers of the female energy, whether of Siva, Krishna, or Rama, are divided into the sub-sects of the Dakshinacharis and Vamacharis, the "right-handed," and "left-handed," the ritual of the latter always being indecent. But all these sects merge into one another. The resemblance of Vishnu's navel to the *linga-yoni* symbol of Siva was early seen, and the Saivas and Vaishnavas are practically one. In Bombay the Brahmans have a saying : "The heart of Vishnu is Siva, and the heart of Siva is Vishnu, and those who think they differ err." The Jainas, the modern Buddhists of India, may be classed as Vaishnavas.

All these sects, except the "left-handed" Saktas, are distinguished by symbols of the deities they worship marked on their foreheads, arms, and breasts. The Vaishnavas are distinguished by perpendicular lines with or without a dot or circle between them, or by a *chakra* or discus, or a triangle, shield, cone, heart-shape, or any similar form, having its apex pointed downward, since Vishnu is water, the property of which is to descend. [Plate M, Nos. 6 to 35.] The Saivas are distinguished by two or more horizontal lines, with or without a dot, below or above the lines,

or on the middle line; or with or without the oval, or half-oval, typical of his third eye bisecting the lines: also by a triangle, or any other pointed or arched object having its apex or convex end upward, since Siva is fire, the-property of which is to ascend. Also the crescent moon and the *trisula* or trident indicate a votary of Siva. [Plate M, Nos. 36 to 69.]

Images of Ganesa and Karttikeya bear the marks of Siva. The images of Indra, Agni, Chandra, Krishna, Rama, Buddha, and Hanuman bear the marks of Vishnu.

The images of Brahma, who is both water and fire, bear the sectarial marks either of Siva or Vishnu, or both combined. [Plate M, Nos. 1 to 5.]

The dot, or *parm*, is the mark of the Supreme Being, and with the lines of Vishnu or Saiva, indicates that the votary so marked claims for Vishnu or Siva, as the case may be, the prerogatives of supreme godhead. The *swastika* [Plate M, No. 70] is the mark distinguishing the Tantric sects. But the left-handed Saktas never avow themselves, and the right-hand seldom bear on the forehead the peculiar mark of their sect for fear of being suspected of belonging to the other branch.

These sectarial marks are colored red, yellow, black, and ashen white; and are made of ashes taken from the sacrificial fire, cowdung, earth of the Ganges, turmeric, sandalwood, *chunam* or lime, red saunders, and turmeric, made adhesive by a size of rice-water.

The horizontal lines of the Saivas are white, and the dot or circlet added to them is painted red, with saunders wood. The Ganapatias paint this dot or circlet with minium, and the Saktas with saffron. The Suras, or worshippers of Surya, paint the three horizontal lines, as well as the circlet or dot, all with red saunders. Considerable latitude is allowed to individual taste and caprice in painting these lines, dots and circlets: and generally the whole character of a Hindu is betrayed at a glance by the manner in which he is marked on his forehead; whether he is orthodox

from conviction, or merely from fashion, or caprice; or whether latitudinarian, or unbelieving; and in conduct loose, or strict; and in temper sober, hard, or gay.

THE JAINAS, AND THEIR TWENTY-FOUR JINS.

Buddhism, the religion of Nipal, Bhutan, Ceylon, Burma, Assam, Siam, China, Japan, Mongolia, Tibet, and of the Kirghis and Kalmuck Tartars, or of nearly 500,000,000 of the human race, survives in India, the holy land of its birth, only [excluding Nipal and Bhutan] in the sect of Jainas, who are worshippers of the images of the twenty-four sectarian saints or Jins, from whose generic designation they take their name. But before describing these images it is necessary to refer to the rise of Buddhism in India, not simply to explain the existence of the Jainas, but because the rise and establishment of Buddhism in India is so intimately associated with the origin of Indian architecture. According to Mr. Fergusson, India owes the introduction of the use of stone for architectural purposes to the great Buddhist king Asoka, who reigned from B.C. 272 to 236, or 260 to 224; and the Buddhists would seem to have learned to employ stone in building from the Greeks and Persians, subsequent to Alexander's invasion of the Panjab, B.C. 337. India has no ancient history, in the strict sense of the word, before the Buddhistic millennium, dating from the death of Gautama Buddha, B.C. 543, to the seventh and ninth centuries of our era, when, with the earliest appearances of the Arabs in Sindh, the modern history of India may be said to begin. While Gautama Buddha was preaching in India, China was at the same time being stirred by the teaching of Confucius, Greece by that of Pythagoras, and Persia by the religious reformation of Zoroaster. It was an age when, owing to the throwing open of the Egyptian ports to free trade by Psammetichus, B.C. 670, commercial intercourse between the Eastern and Western people of the ancient world had undoubtedly

become more intimate than is generally recognised ; and from this date the history of Europe and Asia becomes one and continuous. From the establishment of Buddhism to the fifth and sixth centuries A.D., when the earlier Puranas were compiled, we are almost wholly dependent for our real knowledge of India on the Buddhist monuments and inscriptions, and the writings of the Greek officers of Alexander, Seleucus, and the Ptolemies, and of the Chinese pilgrims who visited the country during the Buddhist period. There is no known Hindu temple, Mr. Fergusson says, older than the sixth or fifth century of the Christian era ; and all the earlier stone buildings in India are Buddhist. Apart from the Buddhist monuments and inscriptions, it is only in the sacred books of the Hindus that we are able to trace the vague and broken outlines of the history of ancient India. All other contemporary native records, if any ever existed, have, so far as is known, perished. Hence, notwithstanding the great antiquity of Hindu civilisation, the chronological history of India is comparatively modern. The people themselves date their chronology, in Hindustan, from Vikramaditya, King of Ujjayini [Ujjain], B.C. 57, and in the Dakhan from his reputed rival Salivahana, king of Prati-shthana [Paithun] on the Godavari, whose era, called also the Saka era, is dated from A.D. 78 ; and there is no connected native chronicle of events in India until after the invasions of Mahmud of Ghazni, A.D. 1001-24. From time immemorial the precious productions of the country had been known to the people of the West ; and in the fifth century B.C. Afghanistan and the Panjab furnished troops to Xerxes in his invasion of Greece, who were left with Mardonius, and fought at Plataea. Still, all our knowledge of India is purely legendary and conjectural until the time of Alexander. From the Vedas and the traditions of the Ramayana and Mahabharata it is supposed that the Aryas must first have entered Afghanistan and the Panjab about three thousand years before Christ, and the mythological Hindu era known as the *Kali-Yuga* also begins from B.C. 3101. The Aryas gradually drove before them the great Dravidian

races now occupying the Madras Presidency, who had entered India from the west long before the Aryas ; and the Turanian races, who had in equally remote prehistoric times poured in through the eastern passes of the Himalayas and occupied the whole of the valley of the Ganges ; and the wild aboriginal tribes who found their last refuge in the hills of Central India. The Ramayana is the record of the invasion of the Dakhan and conquest of Ceylon by Rama, and the date of the events it records is fixed at B.C. 1200. The date of the wars of the kindred Pandavas and Kauravas, which are the subject of the Mahabharata, is fixed at B.C. 1400. The Aryas must have been long settled in Hindustan before civil strife could have broken out among them, or Rama have attempted the conquest of the Dakhan and Ceylon. In the Mahabharata mention is made of Magadha, the modern Bihar, and Sahadeva, a prince of the Lunar dynasty, was then king. It was in Magadha, at Gaya [afterwards known as Buddha-Gaya], and at Kasi, or Varanasi [Benares], that Gautama first preached Buddhism in the reign of Ajatasatru, the thirty-fourth or thirty-fifth in succession, according to the Puranic genealogies, from Sahadeva. Gautama, Prince Siddhartha, afterwards called Sakya-Muni, "the Sakya-saint," and "the Lord Buddha," was born B.C. 623, at Kapilavastu, now Nagar-Khus, about forty miles west of Ayodhya [Oudh], and died B.C. 543 at Kasinagara, now Kasia, about sixty miles east of Kapilavastu. The success of his teaching was immediate. It appealed at once to the instinctive pessimism of the Turanian populations of Eastern Hindustan and their repugnance to the Brahmanical system of their Aryan conquerors, and also to the traditional antagonism of the Kshatriyas themselves toward the Brahman priesthood ; for even before the coming of Gautama Buddha, who utterly rejected caste and priesthood, the Brahmanical system was beginning to give way before the growing secular power of the Kshatriya princes. The sixth king of Magadha, from Ajatasatru, was Nanda, and there were ten Nandas who

reigned for about 100 years from B.C. 400, and it was during their time that Alexander's invasion took place. It was in B.C. 325 that the Grecian camp on the Hyphasis was visited by a defeated rebel escaping from the hands of the king of Magadha. This fugitive was treated only with contempt by Alexander, but when the Greeks had marched back from the Hyphasis, he gathered round him the tribes of the Panjab, and gradually extended his power, until, about B.C. 315, he was, on the death of the last Nanda, placed on the vacant throne of Magadha, under the name of Chandragupta, the Sandracottus of the Greeks, whom, after defeating Seleucus, he drove out of India. Neither Chandragupta, nor his son Bindusara, were Buddhists, but the third of the race, Piyadasi, better known under the name of Asoka [B.C. 272-236 or 260-224], openly adopted the popular and now triumphant creed, and made it the state religion of India. He is the Constantine of Buddhism. Edicts of his establishing Buddhism have been found sculptured in Phœnician letters on rocks in Cuttack, Gujarat, and elsewhere. The most celebrated of them are (1) at Girnar, near Junaghar; (2) at Kapur-di-giri, near Peshawar; (3) at Dhauri in Orissa; and (4) on *lats*, or "pillars," at Delhi and Allahabad. He began the great Buddhist tope or burial shrine at Sanchi, 130 miles east of Ujjayini, about B.C. 267 or 255.

When Gautama Buddha died under the *sal* tree (*Shorea robusta*) at Kasia, his body was burned with great reverence by the local rajas of Malwa, and his charred bones, which they distributed over the whole country, afterwards gave rise to the *stupas*, *dagobas*, *topes*, or relic mounds, which have been discovered in so many parts of India, from the valley of Cabul to the banks of the Kistna. Only eight of these mounds were shrines of actual relics of Gautama Buddha himself, and these are distinguished by Mr. Fergusson by the name of *dagobas* [from *dhatu*, a relic, literally "tooth," and *garbha*, casket, literally "womb"], of which the modern word "pagoda" is a corruption. The Buddhist *stupa* or *tope* is

derived by Mr. Fergusson from the burial mounds of the Turanian races, but, as in India the body is not buried, but burned, the *stupa* or *tope* must be described as a relic, or simply monumental mound. At the original distribution of the ashes of Gautama Buddha, his left canine tooth fell to the province of Orissa, and was enshrined at Dantapura, the "tooth-city," the modern Puri, where the hideous image of Krishna as Jagan-natha has been ingeniously shewn by General Cunningham to be nothing more than the *trisula* symbol, used as one of the finials of the Buddhist *tope* which formerly existed there. The possession of the tooth by the Buddhists at Dantapura led to so much opposition by the Brahmans, that after lying there for nearly 800 years, it was about A.D. 311 removed, to put it out of danger, to Ceylon, where it [it is not a human tooth] still remains. The *tope* at Amravati near Gantur on the Kistna was built about A.D. 322-380 in commemoration of the resting of the tooth at that place on its way to Ceylon. But there are traces of earlier Buddhistic sculptures at Amravati, dating possibly from the Christian era. Another tooth was enshrined in a pagoda on the island of Salsette near Bombay A.D. 234, but this tooth and its pagoda have both long since disappeared. Gautama's celebrated begging-pot was enshrined in the mound erected by Kaniska A.D. 10-50, near Peshawur, the ancient Gandhara, but in after ages it was conveyed to the modern Candahar, where it is said to be religiously preserved by the Mahommedans as a most sacred relic. The number of Buddhist *topes* which have been found in the Cabul valley, about Jellalabad, proves at once how completely the Greek power was at last extinguished by the Scythians in Bactriana, and how remarkable an influence it had on the architecture and allied arts of India. The other well known Buddhist *topes* are the noble tower erected at Buddha Gaya, immediately in front of the *bodhi* tree [*Ficus religiosa*] under which Gautama, Prince Siddhartha, attained to Buddhahood, and which is still growing; and the *tope* at Sarnath in the "Deer Park" near Benares, where Buddha first publicly

promulgated the doctrines and precepts of the "Way of Life" and "Gate of Righteousness." But the most interesting of all these Buddhistic *topes* is that at Bharhut, about one hundred miles northward from Jubbulpur, in the Central Provinces. It was discovered by General Cunningham in 1873, and is assigned by him to the date B.C. 250, the age of the oldest portions of the *topes* at Bhilsa and Buddha Gaya. Under the Maurya dynasty founded by Asoka, Magadha rose to great eminence. Trunk roads traversed the whole of Hindustan from Pataliputra [Palibothra of the Greeks], the modern Patna, westward to the Panjab, and southward, past Bharhut and Bhilsa, to Amravati on the Kistna; and southwestward, by Nasik, to Kalyan, the great port of Western India in ancient times, before it was superseded by Tanna in the middle ages [Mahommedan period], and by Bombay after the Portuguese discovery of the sea-way to India round the Cape of Good Hope. The most intimate commercial intercourse was established with Syria and Egypt: alliances were formed with Antiochus the Great, Antigonus, Ptolemy Philadelphus, and Magas of Cyrene, for the establishment of hospitals, and the protection of Buddhists travelling in their territories, and the arts and sciences and literature of India reached their highest perfection. The whole country was covered with magnificent colleges for the education and retreat of pious Buddhists. These buildings were called *viharas*, a word which gives its name to Bihar, the ancient Magadha, to the great Vihar reservoir near Bombay, and to the city of Bokhara, "Holy Bokhara," in Central Asia; and thus proves the complete ascendancy which Buddhism must at one time have attained in all the countries which naturally fall within the political and commercial influence of India. It spread into Ceylon about the end of the third century B.C., and into Tibet and China A.D. 65; and was carried in the fifth century A.D. by Chinese missionaries into Mexico, where it flourished until the thirteenth century, when it was extirpated by the victorious Aztecs.

But in India itself the Brahmans never ceased to oppose, and,

when they could, to stir up war and persecution against the new state religion. Their great champion was Vicramaditya, the Charlemagne of the Brahmanical revival. Mr. Fergusson believes that he really lived in the sixth century, and that it was simply to make his glory greater that the Brahmins antedated his era to B.C. 56. Be this as it may, in the seventh century Buddhism had almost disappeared from India, except among the fastnesses of the inner Himalayas, in Nipal and Bhutan. In the city of Benares itself it lingered until the ninth century. Its great opponent in the Dakhan was Sankara Acharya, the Saiva missionary who flourished in the eighth or ninth century.

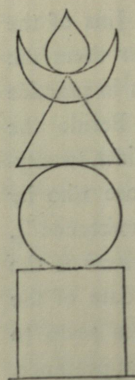
The Jainas first begin to appear conspicuously on the field of Indian history in the seventh and eighth centuries; and the survival of this sect from the fierce persecutions of Buddhism in the eighth and ninth centuries was owing to its compromise with Brahmanism. The Jainas deny indeed the divine inspiration of the Vedas, but they strictly observe caste, and admit the authority of the Brahmins, and acknowledge the whole Hindu pantheon: and provided the rules of caste are observed, the Brahmins will allow of the utmost latitude of religious belief and philosophical opinion. It was resistance to caste and to the sacerdotal claims of the Brahmins which made the impassable gulf between Buddhism and Hinduism.

The Buddhist theogony is essentially identical with the Brahmanical. There is the supreme *Adi-Buddha*, who sprung from the seven-fold lotus, the Buddhistic analogue of the mundane eggs, and created the five divine *Buddhas*, each of whom produced from himself a son or *Bodhisatwa*: and there are the seven human or earth-born *Buddhas*, of whom only the seventh, Gautama, the *Sakya-Muni*, is historical. The future Buddha is called *Arya Maitri*. Again, the Buddhist triad, or mystic syllable AUM, is the identical formula of every Hindu god. The letter A is the *vija-mantra* of the male *Buddha*, the generative power; U, the *vija-mantra* of the female *Dharma* [Law], the type of productive

power; and *m*, the *Sanga* [Congregation], or union of the essences of both. All the *Buddhas* have their *saktis*; their *vahans*, or vehicles; and their attributes, the *chakra* [wheel], *vajra* [thunder-bolt], *padma* [lotus], *trisula* [trident], *ganta* [bell], &c.: and as with the Hindu idols, so with the images of the Buddhists, at least the later, and the Jins of the Jinas, the trail of the old Scythic serpent is over them all. With all its pseudo-spiritualism Buddhism was always in practice more grossly materialistic even than Hinduism. Beside the Hindu deities, the Jinas especially worship certain saints, twenty-four in number, called Jins, or *Tirthankaras* ["those who by ascetic practices have crossed the ocean of human existence"], as superior to the Puranic gods. Of these, *Parswanath* is the twenty-third, and *Mahavira* the twenty-fourth; the date of the latter being not anterior to A.D. 1100. Their images seem to an ordinary observer to be almost identical in appearance, but are easily distinguished on closer inspection by their symbols. When painted, two of them are represented black, two white, two blue, two red, and the rest tawny orange. But in stone they appear as black or white curly-headed upright or seated images, which it is impossible to identify except by their arbitrary characters. It is said that those marked with incised lines round the neck and down the breast are of late origin. They are often marked on their feet or hands with the lotus or with the *chakra* or wheel, which is the Buddhistic symbol of *Dharma*. General Cunningham considers that the *trisula* represents *Dharma*, the Law; more probably it represents *Buddha*; but these were all in their origin sun, and phallic symbols; and *Dharma* means the productive power of nature, the Buddhistic emblem of which is the wheel. Every native of India would at once recognise the *trisula* as the symbol of the generative power, and the *chakra* or wheel of the productive. The Tree so conspicuous in all the ancient Buddhistic sculptures of India has with great probability been supposed to represent *Sanga*, or the Congregation. It is also

represented, I believe, by a sort of heraldic pun, by the Buddhistic *sinha*, or lion. See Plate M, Figs. 71 to 74.

Mr. Fergusson considers that the key to the mystery of these Buddhistic symbols may be found in the annexed diagram.



kha

ka

ra

va

a

This emblem is found also in China and Japan, inscribed with Sanskrit letters, which serve further to designate the parts. Thus the square marked *a* means the earth; the circle *va* represents water; the triangle *ra*, fire; the crescent *ka*, wind; and the cone *kha*, ether. In this way the *trisula* would represent the five elements of the material universe.¹ I have seen in native primers and broad-sheets the earth represented by a square, water by a circle or half-circle, fire by a triangle, and air by a crescent;

but I have never seen the ether represented by any symbol. On the other hand, an upward pointed triangle, and the crescent, and the cone, are all symbols of Siva, and sectarian

¹ Fergusson, *Tree and Serpent Worship*, ed. 1873, pp. 115, 116. Mr. Robert Sewell, of the Madras Civil Service, who has for some years been engaged in investigating archaeological remains in Southern India, and especially the Buddhist sculptures at Amravati, is, I believe, pursuing an enquiry into the origin of the symbols in use among the earlier Hindu races. He traces them back from India to the home of the Aryan sun-worshippers in Western Asia, and thence to their earlier origin in Assyrian, Chaldean, and Egyptian cults. He tells me that his theories are necessarily imperfect, but that he sees strong reason to connect the *trisula* emblem with the *mihir* [winged circle] and *feroher* [symbol of Asshur], and the latter emblems again with the Egyptian *scarabeus*. The *chakra* is now admitted to have been a developed sun emblem, like the *swastika*. There would seem to be no inherent mythological objection to Mr. Sewell's theory, since all the symbols mentioned seem to have been in their origin clearly emblems of the sun, and connected in some way with sun worship. Compare also Thomas on "The Indian Swastika," in the last number of the *Journal of the Numismatic Society*; Schliemann's *Troy*, pp. 16, 31, 101 to 107, 118, 119, and 157; and Cunningham's *Ladak*, p. 377. There is an obvious connexion between the *trisula*, and the *fleur-de-lys* and *trefoil* as mythological emblems.

marks of the Saivas. The crescent, and cone or flame, constantly occur in Mongol [Turkoman] decorative art. The Buddhist *tri-ratna*, "triple-gem" jewel, symbolical of Buddha, the Law, and the Congregation, combines the form of the *trisula* and *chakra*. It is, I believe, only another form of the *yonī-linga*. I believe the *swastika* to be the origin of the key-pattern ornament of Greek and Chinese decorative art.

The Jainas are chiefly found in Gujarat and Kanara; and their sacred places are Palitana, a city of Jaina temples, and Mount Abu, the chief peak of the Aravulli mountains, in Rajputana. They formerly abounded in Southern India, but were much persecuted, particularly at Madura, and finally driven out in the eleventh century.

THE HINDU TEMPLES.

The triumph of the Brahmans over the Buddhists was but short-lived. As they emerged from their retreat in the south, and slowly but surely regained their lost position in the north, the Arabs, followed by the Afghans and Mongols, began to appear in Sindh and the Panjab; and the thousand years of Buddhist supremacy were followed by the thousand years, from the eighth to the eighteenth century, of the tyranny and devastation of the Mahommedan rulers of India. The Mahommedan invasions began with the first desultory incursions of the Arabs under Muhalib, A.D. 664, and Kasim, A.D. 711. The Panjab was occupied by the Turkoman Sabaktegin A.D. 976-996. Hindustan was invaded twelve times between A.D. 1001 and 1024 by Mahmud of Gazni, founder of the first Afghan dynasty of India, which reigned at Gazni and Lahore A.D. 996-1186. It was this fierce iconoclast who sacked and destroyed the Hindu shrines of Taneshwur 1011; of Muttra about 1019; and of Somnath Pattan 1024. Mahommed of Ghor, the founder of the second Afghan dynasty, overthrew the Tomara and Choan Rajputs at Panipat in 1191, and at Taneshwar in 1194. In 1194 he drove the Rathor Rajputs from Kanouj

and Benares into Marwar, where their descendants continued to reign; and before his death, in 1206, the Afghan dominion was firmly established in Gujarat and Oudh, and in Bengal and Bahar, then ruled by the Sena rajas. The chief Hindu princes now left in India were the rajas of Malwa; the Ballabi rajas of Gujarat; the Chalukya rajas of Kalyan; the Andhra rajas of Warangal; and the Bellala rajas of Dwara Samudra ["door of the sea"] or Halabid in Mysore. The Pandyas, whose kingdom was founded in the fifth century B.C., still continued to reign at Madura, and the ancient Chola dynasty at Tanjore, and the Cheras in Travancore and Malabar, and at Coimbatore. The conquest of Hindustan was completed by the annexation of Malwa, Marwar, Gwalior, and Ujjayini in 1231, by the third Afghan dynasty, which ruled at Delhi from A.D. 1206 to 1288. In 1212 the alarm reached India of the conquest of Chingiz Khan in Central Asia; and in the reign of Mahmud II [1244-1266] an embassy was received at Delhi from Halaku Khan, the grandson of Chingiz. The chief event during the fourth Afghan dynasty, A.D. 1288-1321, was the first Mahommedan invasion of the Dakhan in 1294 by Alla-ud-din Khilji, the Sanguinary. Deoghir and Ellichpur were both taken and sacked. In 1297-98 Pattan or Anhalwara, the ancient capital of Gujarat, was utterly destroyed. The subjugation of Rajputana was completed by the conquest of Rintambore in 1300 and of Chitore in 1303; and Halabid in Mysore was destroyed in 1310. In 1298 occurred the first serious incursion of the Mongols into India, when 200,000 Turkoman horsemen succeeded in reaching Delhi, where they were utterly annihilated. The fifth Afghan dynasty of the house of Tughlak reigned at Delhi from 1321 to 1412. Juna Khan, the second emperor, took and destroyed Warangal in 1323; but the period is chiefly remarkable for the revolt of the Mahommedan governors of the Dakhan, and of many of the provincial governors of Hindustan from the Afghans, and for the terrible Mongol invasion under Tamerlane, A.D. 1398. The four Seiads of the sixth Afghan dynasty, A.D. 1414 to 1450, were nominally the

viceroys of the Mongols. The seventh and last Afghan dynasty of the house of Lodi lasted from 1450 to 1526, when it was overthrown at the great battle of Panipat by the Mongols under Sultan Baber, the founder of the Mogol empire of India, which continued as a political power until 1806, and nominally to the death of the 17th Mogol emperor, Mahommed Bahadar, one of the chief instigators of the mutiny of 1857. It was during the last Afghan dynasty that the Portuguese first landed at Calicut on 22 May, 1498.

After the revolt of 1347, the supremacy of Delhi was not again restored in the Dakhan until the time of Akbar, the third Mogol emperor, A.D. 1556-1605. It was during the confusion which followed this rebellion that the fugitives from Warangal founded the powerful Hindu kingdom of Vijanagar, or Bijanagar, which is so often mentioned by the earlier European travellers in India, and now represented by the kingdom of Mysore. The first independent Mahommedan kingdom of the Dakhan was that of the Brahmani kings who reigned at Kulburga, and afterwards at Bidar, from 1347 to 1526. Mahommed II, the fourteenth and last real king of the dynasty, added the Hindu kingdoms of Orissa and the Konkan to his dominions, A.D. 1482-1518. The Brahmani state after its dissolution was divided into the five Mahommedan kingdoms of Bijapur, A.D. 1489-1689; Ahmadnagar, A.D. 1490-1637; Golconda, A.D. 1512-1687; Berar, A.D. 1484-1574; and of Bidar and Kandesh [including Burhanpur and Asirgarh], which lasted from about A.D. 1489 to 1599. All these kingdoms were one after another subverted by Akbar, A.D. 1556-1605, and Aurungzib, the sixth Mogol emperor, A.D. 1658-1707. It was during the reign of Aurungzib that the Maratha rebellion began in Western and Central India, which gradually undermined the power of the great Mogols, until at last in 1806 Shah Alam II was forced to place himself under the protection of the British. From the time indeed of the invasion of the Dakhan by Alla-ud-din in 1294 to its final conquest by the British in 1803-5 and 1817-19,

it was a continued battle-field; Mahomedans kept fighting against Hindus, the Afghan and Mogol emperors of Delhi against the Dakhan Mahomedan states, the Marathas against both, and Haidar Ali, during his usurpation of the Hindu kingdom of Mysore, against the Marathas, until the British were forced to stay the ceaseless strife. Then at length was restored to India such unbroken peace as it had not enjoyed since the ancient times immediately before the invasion of Alexander, the period of the composition of the Ramayana and Mahabharata, when the Hindus reached their highest point of prosperity and cultivation.

It was only in the south of India that the Brahmans for the first few years of the terrible Mahomedan millennium found anything like a sure retreat. Buddhism had never been accepted by the Dravidians, and it was into the Dakhan that the Brahmans had fled during its supremacy in Hindustan; and there again, among the old Hindu states, they found a natural asylum from their new Mahomedan persecutors. No Hindu temple, Mr. Fergusson says, has been brought to light in Southern India older than the eighth century A.D., but from that time forward the building activity of the Dravidians becomes marked, and culminates in the sixteenth and seventeenth centuries. Architecture thus appears to have arisen in Southern India a thousand years later than in Northern India, where the first stone monuments date from the edict pillars of Asoka.

Mr. Fergusson's classification of the styles of Indian architecture is arranged according to the affinities of their progressive development from the ancient Buddhist, "a wooden style, painfully struggling into lithic forms," through all its historical and geographical modifications, to the truly lithic forms of the Jaina, Dravidian, Chalukyan, and Indo-Aryan styles. The architecture of India begins [as unequivocally stated in 1855 by Mr. Fergusson] with a strong admixture of Greek art, the effects of which we are able to trace for centuries in the architecture of the valleys of Cashmere and Cabul. The classical

character of the extensive collection of the Buddhistic sculptures from the neighbourhood of Peshawar, which have been exhibited by Dr. Leitner at the India Museum for the last ten years, is unquestionable ; and incontestably proves the direct influence of Greek art on the architecture of India, throughout the whole period of the culmination of Buddhism in India. In the Cashmere temples, which were all built between the fall of Buddhism and the rise of Mahommedanism, the Greek influence was still very marked. "Nowhere in Cashmere," says Mr. Fergusson, "do we find any trace of the bracket capital of the Hindus, while the Doric or *quasi*-Doric column is found everywhere throughout the valley in temples dating from the eighth to the twelfth century A.D." Indirectly also Greek art has probably influenced the architectural and other arts of India, through the Sassanian art of Persia. From the Mahommedan conquest of India the further development of Buddhist art is to be traced chiefly beyond India in Tibet, Burma, and China, in which countries Buddhism has prevailed without any interruption for more than 2000 years, among races of mankind closely allied to the Turanian population of the Gangetic valley, who first evolved the religion of Buddha, and spread it, with its characteristic architecture, over South-Eastern and Eastern Asia. It would be interesting to trace the influence of the introduction of Buddhism into America in the fourth or fifth century A.D. on the architecture of Mexico.

The earliest illustrations of the Buddhistic architecture of India are the edict pillars [*stambhas* or *lats*] of Asoka. The best known is that at Delhi. The most complete is that which was found in 1837 at Allahabad, which, in addition to the Asoka inscriptions, contains one by Samudra Gupta, A.D. 380-400, and another by Jehangir, A.D. 1605. Its shaft is thirty-three feet in length, and three feet in diameter at the base, diminishing to two feet two inches at the summit. It has lost its crowning ornament, which was, Mr. Fergusson says, most probably a Buddhistic emblem, the *trisula*, or a wheel, or lion ; but the

necking still remains, and is almost a literal copy of the honeysuckle and palmette [knop and flower] pattern of the Greeks. The ornament again occurs on a pillar at Sankissa, between Muttra and Kanouj, surmounting its Persepolitan capital, which supports the figure of an elephant. In both figures the palmette is distinctly of the Assyrian form. Another pillar, with a similar capital, at Bettiah in Tirhut, bears a lion. In this instance, however, the honeysuckle and palmette ornament is replaced by a line of geese, going round the top of the capital in single file. The two pillars at Erun, and the iron pillar at Delhi, although similar to those just described, seem to Mr. Fergusson to belong to the age of the Guptas, in the fourth century A.D., and to be dedicated not to Buddhism, but to the Vaishnava faith. The Asoka *lats* or *stambhas* stood in front of or in connexion with a *stupa*, or Buddhistic building of some sort, which has since disappeared. At Karli, in front of the rock cut Buddhist *chailya* or assembly hall, dating from B.C. 78, a pillar stands, surmounted by four lions, which once, in Mr. Fergusson's opinion, bore a *chakra* or wheel in metal. A corresponding pillar probably once stood on the opposite side bearing some similar emblem, such as the *trisula*. Two pillars are still in these positions in front of the cave at Kenheri, dating from the early years of the fifth century, which is an exact but debased copy of the great Karli cave. There are two built pillars among the *stupas* of the Cabul valley, known as the *sarkh minar*, and the *minar chakri*. They are ascribed by the traditions of the place to Alexander, but are undoubtedly Buddhistic monuments, and are meant to be copies of the pillars of Persepolis.

The relic and monumental mounds [*stupas* or *topes*] at Bhilsa [Sanchi], Bharhut, and Amravati, and at Manikyala, in the Panjab, between the Indus and Jhilum, are all of a similar ground plan and elevation. They are hemispherical mounds of masonry, surrounded by a double railing, the entrance through the inner railing being by four projecting gateways or *torans* facing the four cardinal points. At the top of the dome was a square platform,

in the centre of which stood a four square altar-like structure called by Indian architects a *tee*, surmounted by an umbrella, and surrounded by a decorative railing, with garlands and streamers hanging from it. A course of sculptured stone also went completely round the base of the dome. The *torans* or gateways are formed of two upright pillars, held together at the top by three crossbeams of stone, which project far beyond the side pillars, and are all carved elaborately. Each *toran* is surmounted by pinnacles bearing the usual Buddhist symbols, the *trisula*, the wheel, and the lion, representing the Buddhist triad of Buddha, the Law, and the Congregation. The ground-plan of these *stupas* also, with the return railings of the four projecting entrances, forms a gigantic *swastika* ["auspicious"], the mystic cross [*filfol*] of the Buddhists. This is the usual style of the earlier relic mounds. "No one can, I fancy," observes Mr. Fergusson, "hesitate in believing that the Buddhist dagoba is the direct descendant of the sepulchral tumulus of the Turanian races, whether found in Etruria, Lydia, or among the Scyths of the northern steppes."

The mound erected by Kaniska, A.D. 10-50, near Peshawur, the ancient Gandhara, has since disappeared, but from the descriptions of it given by Fa-Hian, A.D. 400, and Hiouen-Thsang, A.D. 600, it was evidently similar in character to those of Sanchi and Bharhut. The Jelalabad *topes* or *stupas*, the dates of which extend from early in the Christian era, or a little before it, to the seventh century, are all taller in proportion to their breadth than those found in other parts of India, except the *tope* of the "Deer Park" at Sarnath, near Benares, attributed by General Cunningham to the sixth century and by Mr. Fergusson to the later years of the tenth. The celebrated shrine at Buddha Gaya is "a straight-lined pyramidal nine-storeyed temple of the sixth century . . . unlike anything else we find in India before or afterwards, but probably the parent of many nine-storeyed towers found beyond the Himalayas, both in China and elsewhere" [Fergusson, *History*

of *Indian and Eastern Architecture*, p. 70]. The *Farasanda ka Baithak* tower in Bengal probably dates about A.D. 500.

The rock-cut assembly halls, or *chaityas* of the Buddhists, are found chiefly in Western India, where the geological formation of the country naturally suggested their excavation. Nine-tenths of the *chaityas* known have been found in Bombay. Only two groups, at Bihar and Cuttack, exist in Bengal, and two or three insignificant groups in Afghanistan and the Panjab, and one in Madras at Mahabalipur. In date they range from the third century B.C. to the eighth A.D. The *chaityas* excavated in the neighbourhood of Rajagriha, in Bihar, bear inscriptions by Asoka in the twelfth and nineteenth years of his reign. In Bombay, Mr. Fergusson fixes B.C. 129 as the date of the beginning of the Nassik caves; dating before them those of Bhaja [four miles south of the great Karli cave] and Bedsa [ten or eleven miles south of Karli]. The four *chaityas* at Ajanta and the Viswakarma hall at Ellora, and the caves at Dhumnar, halfway between Kotah and Ujjain, were excavated probably at different dates between the fourth and sixth centuries A.D. The great Karli cave we have seen dates from B.C. 78, and the cave at Kenheri from the beginning of the fifth century. One of the most striking features of all these caves is the peaked arch over the façades, and door and window fronts, which is identical in character with the ogee-pointed arch of the façade of the church of St. Mark at Venice, and obviously copied from an original wooden form. The only built *chaitya*, or Buddhist assembly hall, known in India, is at Sanchi.

Buddhist monastery buildings, or *viharas* [*sanga-haramas*], are found in connexion with the *chaitya* caves at Kenheri, Nassik, Ajanta, Ellora, and Dhumnar, and also at Bagh [150 miles northward of Ajanta] and Junir [half-way between Nassik and Poona], in Western India; at Jamalgi, Takht-i-Bhai, and Shah Dehri, in connexion with the Gandhara tope in the Panjab; and at Udayageri, five miles from Bhuvaneswar, near Cuttack, in Orissa. These

are all rock-cut monasteries, consisting of simple cells, ranged round a more or less rectangular court, and presenting few architectural features beyond the pillars and arches of a portico or arcade where it existed. There was, however, Mr. Fergusson believes, a structural *vihara* in five or more storeys, the original of all the temples in Southern India. The great pyramidal *rath*, in five storeys, at Mahabalipur ["city of the great Bali," generally known as "the seven Pagodas"], thirty-five miles south of Madras, probably correctly represents, in his opinion, such a structure.

The Buddhistic style was succeeded by the Jaina. The first complete specimen of Jaina architecture we meet with is of the eleventh century at Mount Abu. This is not inconsistent with the fact that General Cunningham has lately found some Jaina statues at Muttra of A.D. 177. No doubt Jains did exist and build temples during the whole of the interval between the second and the eleventh centuries. If we could trace back Jaina architecture continuously from about A.D. 1000, when we at last lose sight of true Buddhist architecture, and if we could trace Buddhist architecture continuously down to A.D. 1000, we should find the former gradually developing from the latter; not that the former has wholly grown out of the latter, but that both had also their origin in an older style, more Turanian than either, the Greek and Sassanian influence on which has been transmitted to the Jaina architecture through the Buddhist. The characteristic feature of the Jaina buildings is the horizontal archway, which completely relieves any wall through which it gives passage from the strain of the outward thrust of a true radiating arch. The bracket form of capital is also largely introduced in Jaina buildings for the first time in Indian architecture. The ground-plan of the Jaina temples is shewn by the temple of Aiwalli [*circa* A.D. 650], in Dharwar, in Western India, to be derived from the Buddhist *chaitya*. It is identical with the ground-plan of the structural *chaitya* at Sanchi, but there is a doorway through the circular apse at the end; for in the Jaina temple it does not entomb a relic, but covers an image

to which the worshippers must have access; and there is a thickening of the apse wall to enable it to carry the tower, marking the position of the image, in place of the light wooden roof of the Buddhist structural assembly hall. If from the temple at Aiwalli we pass to the neighbouring one at Pittadkul, built probably two centuries later [*i.e. circa* A.D. 850], we find that the circular apse of the Buddhists has entirely disappeared, and the cell has become the base of a square tower, as it remained ever afterwards. The nave of the *chaitya* has become a well-defined *mantapa* or porch, in front of but distinct from the cell, and these two features, in an infinite variety of forms, are the essential elements of the plans of Jaina and Hindu temples of all subsequent ages.

The *sikra*, or tower, called also the *vimana*, is a peculiarity common to both Jaina and Hindu architecture in Northern India. In the ordinary Jaina temples, the image is invariably placed in a square cell, which receives its light from the doorway only. It seems also an invariable rule that the presence and position of the presiding idol should be indicated externally by a tower, and that though square, or nearly so, in plan, it should have a curvilinear outline. The upper part of these towers overhangs the base, and bends inwards toward the top, which is surmounted by a melon-shaped member called the *amalika*, from its supposed resemblance to the fruit of the *Phyllanthus Emblica*. But it is probably derived from the fruit of the lotus, through the Indian water vessel or *lota*. The northern Jaina style is seen principally in the beautiful Jaina "cities of temples" at Palatina and Girnar, in Gujarat, and at Mount Abu, the chief peak of the Aravali range, where the sacred Nucki Talao ["pearl lake"] is one of the loveliest gems of architecture in all India; and at Parswanath, the highest point of the Bengal range of hills, south of Rajmahal. There are ruins of great Jaina temples at Gwalior, at Khajuraho, 125 miles westward of Allahabad, at Gyaspore, near Bhilsa, in Central India, at Amwah, near Ajanta, and at Chitore, in Rajputana, where the noble nine-storeyed pagoda was erected as a

jaya stambha, or "tower of victory," to commemorate the victory of the Rajput raja Khambo over Mahmud of Malwa, A.D. 1439. The Indra cave at Ellora is a Jaina structure, dating from before A.D. 750. There are very extensive modern Jaina temples at Sonaghur, in Bandelkhand, at Delhi, and at Ahmedabad in Gujarat.

In Southern India there are two classes of Jaina temples, called *bettus* and *bastis*. The *bettus* contain, not images of a Tirthankar, but of Gomata Raja, though who he was and why worshipped no one knows. His colossal images are probably the survival of a vague local tradition of Gautama Buddha. Only three are known. The *bastis* are ordinary Jaina temples dedicated to the Tirthankars, and those at Sravana Belgula are the grandest examples of Jaina architecture in all India. They are all of the Dravidian style, and the *vimanas*, or towers, are surmounted with a small dome, instead of the *amalika* ornament of the northern *sikras*. "It may be a vain speculation," says Mr. Fergusson, "but it seems impossible to look at this group of temples and not be struck by their resemblance to the temples of Babylonia. The same division into storeys with their cells, the backward position of the temple itself, the panelled or pilastered basement, are all points of resemblance it seems difficult to regard as purely accidental." All these domed and pillared temples of the Jainas, whatever indirect influences they may have received from other sources, Mr. Fergusson traces back directly to the storeyed monasteries of the Buddhists. The temples and priests' tombs at Mudbidri, in Canara, must owe their literal Tibetan character to some direct connexion, at the period of their construction, between Tibet and Southern India. They resemble the wooden temples of Dungri, said to be 600 years old, figured in Calvert's *Kulu*, and seem to suggest a clue to the origin of all the towered Hindu temples in some primitive wooden type indigenous to the Deodar valleys of the inner Himalayas. The Cashmerian temples seem to be a natural dissection of the Hindu temple forms into their primitive Mongolian and Græco-Roman elements.

For Jaina architecture is one of the sources of all Hindu styles, Dravidian, Chalukyan, or Indo-Aryan, the chief difference between them being, that while the Jaina temple is always twelve-pillared, the Hindu temple when pure in style is absolutely astylar. The Indo-Aryan style had indeed an independent centre of origin, but it never developed into a thoroughly original Brahmanical style. No temples are mentioned in the Vedas, and so long as the Vedic religion remained there were no temples built. It was only when it was corrupted by the Turanian and Dravidian converts to it that the Hindus began to require temples. But between the fall of Buddhism and the advent of the Mahomedans, the Jainas had stepped in with a ready-made style, and the followers of Vishnu and Siva having had no time to develop an independent style of their own before it was too late, were forced to adopt that of their religious rivals.

Of the three varieties of Brahmanical architecture, the Dravidian style prevails in the Dakhan, south of the Kistna, the Chalukyan between the Kistna and Mahanuddi, and the Indo-Aryan in Hindustan.

The Dravidian temple is distinguished by its rectangular ground-plan and storeyed pyramidal tower; the Chalukyan, by its star-like ground plan and pyramidal tower; and the Indo-Aryan by its square ground-plan, and curvilinear *sikra* or tower. In the Dravidian style, the temple almost invariably includes, beside the *vimana* or towered shrine, the *mantapa* or porch leading to the shrine; the *choultri* or pillared hall; numerous other buildings; elegant *stambhas* or pillars, bearing the images or flags of the gods, or numberless lamps all connected with the temple worship and service; tanks and gardens, and avenues of palms and sacred trees: and all these various portions are surrounded by the temple enclosure, with its grand *gopuras* or gateways. The architectural effect therefore of such temples as those of Tanjore, Tiruvalur, Seringham, Chillambaram, Rameswaram, Madura, Tinnevely, Conjeveram, Vellore, Perur, and Vijayanagar, is most

imposing. There is nothing in Europe that can be compared with their grandeur and solemnity, and for parallels to them we must go back to ancient Egypt and Assyria, and the temple at Jerusalem. The rock-cut Kylas at Ellora was executed by southern Dravidians, either the Cheras or Cholas, who had sway there during the eclipse of the Chalukyas between A.D. 750 and 950.

The noblest example of the Chalukyan style is the great temple of Halabid, the old capital of the Rajput Ballalas of Mysore. Unfortunately, it was never finished, having been stopped by the Mahommedan conquest A.D. 1310. It is a double temple. The building is raised on a terrace from five feet to six feet in height. On this stands a frieze of elephants, 2,000 in number, following all the sinuosities of the star-like ground plan. Above it is a frieze of lions, then a band of scrollwork of infinite beauty and variety of design; over which is a frieze of horsemen, and then comes another scroll, over which is a frieze representing the conquest of Sanka by Rama. Then succeed two friezes, one above the other, of celestial beasts and celestial birds; and above these a cornice of scrollwork, bearing a rail, divided into panels, each containing two figures; over which are windows of pierced slabs of stone, divided at regular intervals, marked by the abutments of the temple by groups five feet six inches in height, of the gods and heavenly Apsaras of the Hindu pantheon. Above all would have risen, if the temple had been finished, the pyramidal towers of the structure. The Chalukyan style is seen also in the temple of Kait Iswara at Halabid, and the temples of Somnathpur and Baillur, both in Mysore; and in those of Buchropully, not far from Hyderabad, and of Hammoncondah, or Warangal, also in the Nizam's dominion. The Indo-Aryan style is found in its greatest purity in Orissa. Among the 500 or 600 original shrines of Bhuvaneswar not a pillar is to be found, and those added to the porches of the temples at Bhuvaneswar and Puri are of the twelfth and fourteenth centuries. Sometimes there are gateways, but they are very subordinate features, and there

are no enclosures as in the South. That two peoples inhabiting the same country, and worshipping the same gods, under the same Brahmanical priesthood, should have developed and adhered to two such dissimilar styles, shews clearly, as Mr. Fergusson points out, how much race has to do with architecture.

There is nothing in Buddhist, or any other architecture, at all like the curvilinear square *sikra* or tower of the Indo-Aryan temples in Hindustan. It does not seem to be derived from any form which can as yet be recognised as its source.

"I have looked longer," writes Mr. Fergusson, "and perhaps thought more on this problem than on any other of its class connected with Indian architecture . . . and its real solution will probably be found in the accidental discovery of old temples, so old as to betray in their primitive rudeness the secret we are now guessing at in vain." He indicates that it is in the great table-land of Central India, from which the Soane, and Mahanuddi, and Nerbudda, all spring, one of the principal seats of the aboriginal tribes of India, and to which the highest traditional sanctity is attached, that the temple will be found which will reveal the origin of the Indo-Aryan temple style. Beside the great temple of Bhuvaneswar, the "black pagoda" of Kanaruc, and the temple of Jagannatha at Puri, are remarkable Orissan examples of the Indo-Aryan or Dasyu Brahmanical style. After them, the oldest and most characteristic example of this style is the temple of Pittadkul, near Badami, in the Dharwar district of the Bombay Presidency. There are also three Brahmanical rock-cut temples at Badami, the age of which Mr. Fergusson places between A.D. 500 and 750, or synchronously with the Indo-Aryan portion of the series of Buddhist, Jaina, and Indo-Aryan and Dravidian caves at Ellora; and another rock-cut temple at Dhumnar in Rajputana, the Buddhistic excavations of which place have been already noticed. The Brahmanical temple at Dhumnar is the only one example known in which the Dasyu-Brahmanical architects attempted to rival the Dravidian by introducing a

monolithic exterior. It is not an interior excavation simply like that at Badami, but a temple cut bodily out of the rock. The Brahmanical excavations at Elephanta, near Bombay, also belong to the eighth century.

There are many splendid structural temples of the so-called Indo-Aryan style in Central or Northern India; at Gwalior, Khajuraho, Udaipur, Benares, and Bindraband; and one of a remarkable aberrant form at Kantonagar near Dinajpur. The peculiar curved arch seen in pavilions connected with temples along the banks of the Ganges, and in the architecture generally of Northern India, is derived from the curvilinear roof which the Bengalis have learned to give their houses, by bending the bamboos used as a support for the thatch, or tiles. At the South Kensington museum the same curved form is seen in the roof of a shrine of Byzantine work.

I have borrowed so copiously from what Mr. Fergusson has written on the architectural history of Hindu temples because the domestic and foreign influences which affect the arts of a country are always most satisfactorily traced in its architecture. Those also who are familiar with the decorative details of the art manufactures of India will recognise a distinct Dravidian style marked by the use of *swami* ornament. There are other distinct styles. One marked by the knop and flower pattern is called Saracenic, but I prefer to call it Aryan, because the use of its characteristic ornamentation was simply revived in India by the Persianised Arabs, Afghans, and Mongols. Another presents the archaic forms of ornament found in the jewelry and other art-work of central India, and Orissa, and parts of Bengal. It is a purely indigenous style, and yet quite distinct from the style prevailing among the so-called aboriginal Turanian tribes of the inner Himalayas, the decorative forms of which are often quite Chinese. It does not seem possible as yet to classify any of these styles systematically; but Mr. Fergusson's grouping of the temple architecture of India suggests a clue by

which the student of the minor arts of India may be led to an analogous classification of them. The meaning of such terms as Indian and Aryan must, however, be first decided. The chief Aryan influence on the arts of India has been that of the force of a superior intellect, which gives to all forms, whencesoever derived, the universal expression, which is the distinguishing mark of Indian art. The Aryan influence has reached India through the Greeks, through Persia, and through the immemorial commerce of India with the West, but above all from the Vedic Aryas, through the Brahmanical Hindus : a race formed in the south by admixture with Dravidians, in the north-east with Turanians, in the north-west with Scythians, and in Central India and other inaccessible parts with what seem to be the true aboriginal peoples of the peninsula.

The Hindus themselves classify their temples according to the idols worshipped in them. The *mandira* is dedicated to the *linga*, and is double-roofed. The *deula* is sacred to Jagannatha, and has an iron image of *Garuda* on the pinnacle. The *trisula* on the pinnacle distinguishes a temple of Siva, and a wheel one of Vishnu. The *pancha-ratna* ["five gems"] temple has four smaller turrets at the corners of the square cell from which the central tower springs, and is dedicated to Vishnu in his various forms of Krishna. The *nava-ratna* ["nine gems"], also a Vaishnava temple, has a double roof like the *mandira*, with four turrets on one roof, and four at the corners of the central tower, which forms the other. The *Vishnu-mandira* and the *Chandi-mandira* are small flat-roofed temples, or cells, sacred to Vishnu, and Durga or Kali, respectively. The *yora-bangala* is made like two thatched houses placed side by side, and is used for different gods. The *rasa-mancha* is an octagonal temple with eight turrets, sacred to Krishna. The *dola-mancha* is a similar building. The *devalaya* consists of a number of temples built in a square.

SACRIFICIAL UTENSILS.

The articles [*upacharas*] used in the worship [*puja*] of the gods are too numerous to be systematically named, but the principal of them are illustrated in the mythological plates N and O. Numbers 1 and 2, plate N, are different forms of the *nandi-linga*, or *naga-nandi-linga* image. The *panchayatana*, or family shrine, seen in every Hindu house in Western India, is furnished with the symbols of Siva [*linga*] or Siva and Parvati combined [*linga* and *yoni*], and the images of Parvati, Ganesa, and Vishnu, and often also of Karttikeya. The pyramid of five balls, often seen in these *panchayatans*, is the *pancha-pinda*. The four balls forming the base of the pyramid represent Vishnu, Surya, Parvati, and Ganesa, and the fifth ball at the apex Siva. If there is only one ball [*sruvana mukhi*] it represents Parvati. Sometimes Vishnu is represented by the *saligrama*, Ganesa by the *binlang*, and Surya by the *surya-kanta* [see "Sacred Stones"]. No. 3 is a *sinhasana*, or throne on which the idol is placed. No. 4 is the *ganta*, or bell, which is rung to call its attention to the worshipper; and No. 5, the *sankha*, or conch shell, which is blown for the same purpose; and also at the conclusion of certain ceremonies. No. 6 is one of the innumerable forms of the *aratika*, or lamp, which is waved in a circular manner before the idol; and 7 and 8 are *dhupdans*, or incense-holders, for censuring it. Sometimes an artistically pierced and mounted shell is used as the censer. The *darpan* is the looking-glass in which the reflexion of the idol, when it is of clay, is washed and anointed. Number 1, plate O, is the shell, resting on its mystic tripod, used for pouring water on the idol. No. 2, plate O, are two *surwas*, or spoons, the larger generally of brass, being used for lustrations, and the smaller, generally of copper, for offering water to the idol to drink. These spoons are often very beautiful in form and decoration, being ornamented

with the figures of the gods to whose worship they are consecrated. No. 3 is a *lota*, or ewer, for holding the water of the sacrificial service. The vessels specially made for holding Ganges water are generally flattened from side to side, or from above and below. The *ghata* is a large earthen vessel used in the worship of many of the gods, particularly of Varuna and Lakshmi. It is filled with Ganges water, and twigs of sacred plants, and invoked as Varuna, or Lakshmi, or any other god or goddess to whom it may be consecrated. Numbers 4 and 5, plate O, are copper vessels used in offering flowers. The larger is called *sampatni*, and the smaller *katori*. No. 7 is a *tali*, or brass tray, for offering fruits and sweetmeats. A larger tray for holding all the offerings made to an idol, is called *varanadala*. No. 8 is the mystical *arghya patra*, or cornucopia for holding the offerings made to the idols of *til* [sesamum] seed, Kusa grass, *dub* or *durva* grass, flowers, and sandalwood powder, or of water sprinkled with colored and perfumed powders. The *arghya patra*, the *surwa* [spoon], and the *lota*, called in its religious use the *prokshani-patra*, for holding the water of lustration, are the three necessary utensils for the due performance of all worship.

The mystic *arghya* may be established in any object of a similar shape, and the *arghya patra* figured in plate O, apart from its religious use, is called a *kosa*. A spoon of similar shape something like an English tablespoon, with the handle cut short, called *kusi*, is often used instead of the *surwa* for lustrations; and a round open bowl, called *kunda*, for holding water, in place of the ordinary *lota*. Almost any flower may be offered to the idols, but red flowers are preferred in the worship of Siva, Parvati, Ganesa, and Hanuman; and yellow in the worship of Vishnu and Krishna, and their consorts [see "Sacred Plants"]. A necklace of *tulsi* seeds or stalks is worn by the worshippers of Vishnu; of *rudraksh* seeds by those of Siva; of *kamal* seeds by those of Ganesa [see "Sacred Plants"]; and of crystal in the worship of Surya.

The *asana* is a carpet or seat on which the worshipper sits while performing any ceremony. The *sri* is a representation of Mount Meru in the form of a disc from which rises a cone, crowned with the lotus bud. It is ornamented with flowers and birds in the manner of the hawthorn blossom Dresden china vases, and stamped with the auspicious sign of the triangle. It is a mystic representation of the generative principle of nature. The *khadga*, or sacrificial sword, is said to have been begotten by Brahma. It is a long cleaver, with a deep blade nearly the whole length of the handle, broadened, with a curved outline, to double its depth at the end, where an eye is painted in red and black on each side.

EVIL INFLUENCE OF THE PURANAS ON INDIAN ART.

The mythology of the Puranas is not an essential element in Hindu art, which, however, it has profoundly influenced. It lends itself happily enough to decorative art; but has had a fatal effect in blighting the growth of true pictorial and plastic art in India. The monstrous shapes of the Puranic deities are unsuitable for the higher forms of artistic representation; and this is possibly why sculpture and painting are unknown, as fine arts, in India. Where the Indian artist is left free from the trammels of the Puranic mythology he has frequently shewn an instinctive capacity for fine art. The ancient Buddhist sculptures of Sanchi, Bharhut, and Amravati display no mean skill, and some of the scenes from Buddha's life, in which he is represented in purely human shape without any ritualistic disfigurement, are of great beauty. Many also of the more popular scenes of the Ramayana and Mahabharata, such as the marriage and honeymoon of Rama and Sita, and Krishna's courtship of Radha and Rukmini, are free from the intrusion of the Puranic gods, and the common bazaar paintings of them often approach the ideal expression of true pictorial art. They shew little knowledge of perspective, but tell their story naturally;

while a certain characteristic symmetry of composition, borrowed from decorative art, has its legitimate attraction.

Admirably though the unnatural figures of the Puranic gods, derived from the Dravidian and Indo-Chinese races of India, sometimes shew indetailed ornamentation, yet their employment for this purpose is in direct defection from the use of the lovelier, nobler forms of trees and flowers. The latter forms were introduced in the decorative arts by the Aryan race wherever it went; and after being comparatively suppressed for centuries in India, as they still are in the South, were again brought into fashion by the Afghans and Mongols [Turkomans] from Persia; where this charming style of religious symbolism, springing from the love and worship of nature intuitive in the Aryas, has prevailed from the remotest antiquity, and reached its perfected development in the time of the Sassanian dynasty, *circa* A.D. 226—641.

THE ANTIQUITY OF INDIAN ART.

How intimately the Hindus live in their sacred writings, was remarkably illustrated during the Prince of Wales' visit to India in 1875-6, when the Raja of Jaipur deliberately planned the decorations of his royal city and the ceremonial of the Prince's reception, from the descriptions of Ayodhya, and the court of the Maharaja Dasaratha, in the Ramayana. In his recent poem, *The Light of Asia*, Mr. Edwin Arnold, C.S.I., has given a series of pictures of the city, and court, and country life of the Buddhistic state of Kapilavastu 2000 years ago, the fascination of which has been felt by all who know India. The King Suddhodana, on the birth of his son Gautama, Prince Siddhartha, gave order that Kapilavastu should rejoice:—

“ Therefore the ways were swept,
Rose odours sprinkled in the streets, the trees
Were hung with lamps and flags, while merry crowds
Gaped on the sword players and posturers,
The jugglers, charmers, swingers, rope walkers,
The nautch girls in their spangled skirts and bells,
That chime light laughter round their restless feet ;

The masquers wrapped in skins of bear and deer,
 The tiger tamers, wrestlers, quail fighters,
 Beaters of drum, and twanglers of the wire,
 Who make the people happy by command.
 Moreover from afar came merchantmen,
 Bringing, on tidings of his birth, rich gifts,
 In golden trays ; goat shawls, and nard and jade,
 Turkises 'evening sky' tint, woven webs.

* * *

Homage from tribute cities."

One day the king takes the young prince out for a drive
 through the suburbs of the city.

"So they rode

Into a land of wells and gardens, where,
 All up and down the rich red loam, the steers
 Strained their strong shoulders in the creaking yoke,
 Dragging the ploughs ; the fat soil rose and rolled
 In smooth dark waves back from the plough ; who drove
 Planted both feet upon the leaping share,
 To make the furrow deep.

* * *

Elsewhere were sowers who went forth to sow ;

* * *

The kites sailed circles in the golden air.
 About the painted temples peacocks flew,
 The blue doves cooed from every well, far off
 The village drums beat for some marriage feast ;
 All things spoke peace and plenty, and the Prince
 Saw and rejoiced."

Later the Prince drives through the town itself.

"Therefore the stones were swept, and up and down
 The water carriers sprinkled all the streets
 From squirting skins, the housewives scattered fresh
 Red powder on their thresholds, strung new wreaths,¹
 And trimmed the tulsi-bush before their doors.

¹ These are strings of alternate leaves and flowers, or of pieces of many-colored silk or cloth, richly embroidered, which are hung across the tops of Hindu doors on birthdays, and other festive occasions.

The paintings on the walls were heightened up
 With liberal brush, the trees set thick with flags,
 The idols gilded ; in the four-went ways,
 Surya-deva and the great gods shone
 Mid shrines of leaves ; so that the city seemed
 A capital of some enchanted land.

* * * *

While the Prince
 Came forth in painted car, which two steers drew,
 Milkwhite, with swinging dewlaps, and huge humps
 Wrinkled against the carved and lacquered yoke.

* * *

So passed they through the gates, a joyous crowd,
 Thronging about the wheels, whereof some ran
 Before the oxen, throwing wreaths, some stroked
 Their silken flanks, some brought them rice and cakes,
 All crying 'Jai! Jai!' for our noble Prince."

In these word-pictures, Mr. Arnold is scrupulously faithful to the text of the Hindu epics, and the almost contemporary Buddhist books known as the *Tri-Pitaka*, or "three caskets." Yet they are as minutely and accurately true of modern India. Those who know Bombay and Poona will think that Mr. Arnold is describing the bazaar of Bombay, or the streets of Poona, and the cultivated country round that fair Maratha city, before the wide plain beyond is reached : while others familiar with Lahore, or Benares, or Tanjore, will believe that he intends one or other of those cities. The same is true of the descriptions given by Mr. Arnold of marriage and funeral ceremonies, sacrifices, and village sports and feasts ; the simple explanation being that the life and arts of India, as in a lesser degree of the East generally, are still the life and arts of antiquity. This is their supreme charm. It is said that the continuity of social life, and with it of the arts, in India has been owing to the isolation of the vast peninsula, which is supposed to be separated by the Himalayas and the sea from other countries. But it is not so. India lies in the track of the great commerce which has always subsisted between the East and West, and, excepting the Bhils, Gonds, Kols, Khonds, and other savage aborigines, it is through

the Himalayas and Suliman Mountains that it has received its entire population, Indo-Chinese, Dravidian, Aryan, Scythic, Afghan, and Mongol [Turkoman]. Through the Afghan passes lie the nearest routes of the export trade of Central Asia to the sea; and through these passes it is that the Brahmanical Hindus were successively subjected by the Scythic Nagas, Afghans, and Mongols [Turkomans], and invaded by the Persians under Darius, B.C. 518, by the Greeks under Alexander, B.C. 312, and under Seleucus, B.C. 312, and again by the Persians under Naushirvan, A.D. 521-579, and under Nadir Shah, A.D. 1730. Under Ahmad Shah Abdali, India was again invaded by the Afghans six times between A.D. 1748 and 1757. The Scythians, who would seem to have first entered India seven hundred years B.C., were not finally driven out until their great defeat at Karur by Vicramaditya, which Mr. Fergusson fixes at A.D. 544. The ascendancy of Buddhism for a thousand years in India was perhaps connected with their protracted domination. So far from the Himalayas isolating India from the great cradle of the Aryan and other human races in Turkestan, it is an historical fact that whenever Central Asia has had a strong ruler, he has virtually ruled in India also. More perhaps than any other country has India been subjected to foreign rule, and overrun and devastated from end to end by armed invasion; and as a consequence its population is wonderfully mixed and receptive of foreign influences. Indian art has borrowed freely from Turanian, Dravidian, Greek, Sassanian, Mongol, and European sources. It might indeed be plausibly argued that there is nothing original in Indian art, nor indeed anything older in its minor arts than the sixteenth century, when the Mogol empire was established by Baber. But the assimilative power of the Hindus is as remarkable as their receptive power, and in the hands of their hereditary craftsmen everything they copy in time assumes the distinctive expression of Indian art. This is really owing to the homogeneous unity given to the immense mixed population [about 250,000,000] of India by the Code of Manu. It is a population of literally "teeming

millions," nearly all of one way of life and thought, and everything brought into contact with it is at length subdued to its predominant nature.

Moreover, the Code of Manu has secured in the village system of India a permanent endowment of the class of hereditary artisans and art workmen, who of themselves constitute a vast population ; and the mere touch of their fingers, trained for 3000 years to the same manipulations, is sufficient to transform whatever foreign work is placed for imitation in their hands, "into something rich and strange" and characteristically Indian.

PART II.

THE MASTER HANDICRAFTS OF INDIA.

It is impossible in describing the handicrafts of India to follow the classification usually adopted of the arts and industries of Europe, based as it is on the broad distinction that must always be drawn between art and industry when industrial productions are no longer hand wrought but manufactured by machines. Thus the very word manufacture has in Europe come at last to lose well nigh all trace of its true etymological meaning, and is now generally used for the process of the conversion of raw materials into articles suitable for the use of man by machinery. Work thus executed, in which the invention and hand of a cunning workman have had no part, must be classified by itself, and under the most intricate and elaborate divisions.

In India everything is hand wrought, and everything, down to the cheapest toy or earthen vessel, is therefore more or less a work of art. It is not of course meant to rank the decorative art of India, which is a crystallised tradition, although perfect in form, with the fine arts of Europe, wherein the inventive genius of the artist, acting on his own spontaneous inspiration, asserts itself in true creation. The spirit of fine art is indeed everywhere latent in India, but it has yet to be quickened again into operation. It has slept ever since the Aryan genius of the people would seem to have exhausted itself in the production of the Ramayana and Mahabharata. But the Indian workman, from the humblest potter to the most cunning embroiderer in blue and

purple and scarlet [Ex. xxxviii 23], is not the less a true artist, although he seldom rises above the traditions of his art.

Many separate elements have contributed toward the development of the decorative arts of India. There are the simple archaic forms of the aboriginal negroid tribes who are now found only in the hills, or in the more inaccessible parts of the upland plains of Central India; the wild fantastic forms of the Indo-Chinese tribes of the Eastern Himalayas and Burmese frontier; the monstrous [*"swami"*] forms of the Dravidian races of the Dakhan; and the primitive Aryan beast and flower forms of Hindustan, and revived Aryan knop and flower pattern reintroduced into India by its Persianised Afghan, and Mongol [Turkoman], conquerors. Indian collections are now also seen to be more and more overcrowded with mongrel forms, the result of the influences on Indian art of European society, European education, and above all of the irresistible energy of the mechanical productiveness of Birmingham and Manchester. Through all these means foreign forms of ornament are being constantly introduced into the country; and so rapidly are they spreading, that there is a real fear that they may at last irretrievably vitiate the native tradition of the decorative art of India. The worst mischief is perhaps done by the architecture foisted on the country by the Government of India, which, because it is the architecture of the Government, is naturally thought to be worthy of all imitation. The Nawab of Bahawalpur was installed the other day on the throne of his ancestors, and in anticipation of the auspicious event the Indian Government built him a palace, which is the ghastliest piece of bare classicalism it is possible to imagine, even with so many examples before us in this country of the dissenting chapels and vestry halls of the last century. And now Holkar, in obvious emulation of this preposterous production, is building for himself a vast Italian palace at Indore, which is to cost many lakhs of rupees, and will be like Trertham, or Buckingham Palace, or anything else in the world but a habitation meet for kings. This sort of thing

has been going on all over India ever since the establishment of the British peace in 1803-6 and 1818-19, and is the fountain head and origin of all the evil we deplore.

The natives have, indeed, a great genius for imitation. Thus Nearchus [Strabo, xv. 1, 67], producing proofs of their skill in works of art, says that, when they saw sponges in use among the Macedonians, they imitated them by sewing hairs, thin threads, and strings, inextricably through flocks of wool, and, after the wool was well felted together, drawing out the hair and thread and strings, when a perfect sponge remained, which they dyed with bright colours. That is exactly what a native, under a happy inspiration, would do. There quickly also appeared among Alexander's Indian camp followers manufacturers of brushes for scrubbing the body, and of vessels for oil, like to which they saw the Greeks using.

Terry, in his *Voyage to the East Indies*, 1655, in describing the people of India, writes:—"The natives there shew very much ingenuity in their curious manufactures, as in their silk stuffs, which they most artificially weave, some of them very neatly mingled either with silver or gold, or both. As also in making excellent quilts of their stained cloth, or of fresh-colored taffata lined with their pintadoes [prints or chintz], or of their sattin lined with taffata, betwixt which they put cotton wool, and work them together with silk . . . They make likewise excellent carpets of their cotton wool, in fine mingled colours, some of them three yards broad, and of a great length. Some other richer carpets they make all of silk, so artificially mixed, as that they lively represent those flowers and figures made in them. The ground of some other of their very rich carpets is silver or gold, about which are such silken flowers and figures as before I named, most excellently and orderly disposed throughout the whole work. Their skill is likewise exquisite in making of cabinets, boxes, trunks, and standishes, curiously wrought, within and without; inlaid with elephants' teeth, or mother-of-pearl, ebony, tortoiseshell, or wire; they make excellent cups and other things of agate or cornelian, and

curious they are in cutting of all manner of stones, diamonds as well as others. They paint staves or bedsteads, chests or boxes, fruit dishes, or large chargers, extremely neat, which, when they be not inlaid, as before, they cover the wood, first being handsomely turned, with a thick gum, then put their paint on, most artificially made of liquid silver, or gold, or other lively colours, which they use, and after make it much more beautiful with a very clear varnish put upon it. They are also excellent at limning, and will copy out any picture they see to the life The truth is, that the natives of that monarchy are the best apes for imitation in the world, so full of ingenuity, that they will make any new thing by pattern, how hard soever it seem to be done; and therefore it is no marvel if the natives there make shoes, boots, cloaths, linen, bands, and cuffs, of our English fashion, which are all of them very much different from their fashions and habits, and yet make them all exceedingly neat."

The Cashmere trade in shawls has been ruined through the quickness with which the caste weavers have adopted the "improved shawl patterns" which the French agents of the Paris import houses have set before them.

We therefore incur a great responsibility in attempting to interfere in the direct art education of a people who already possess the tradition of a system of decoration founded on perfect principles, which they have learned through centuries of practice to apply with unerring truth. What, however, is chiefly to be dreaded is the general introduction of machinery into India. We are just beginning in Europe to understand what things may be done by machinery, and what must be done by hand work, if art is of the slightest consideration in the matter. But if, owing to the operation of certain economic causes, machinery were to be gradually introduced into India for the manufacture of its great traditional handicrafts, there would ensue an industrial revolution which, if not directed by an intelligent and instructed public opinion and the general prevalence of refined taste, would

inevitably throw the traditional arts of the country into the same confusion of principles, and of their practical application to the objects of daily necessity, which has for three generations been the destruction of decorative art and of middle-class taste in England and North-western Europe, and the United States of America.

The social and moral evils of the introduction of machinery into India are likely to be still greater. At present the industries of India are carried on all over the country, although hand-weaving is everywhere languishing in the unequal competition with Manchester and the Presidency Mills. But in every Indian village all the traditional handicrafts are still to be found at work.

Outside the entrance of the single village street, on an exposed rise of ground, the hereditary potter sits by his wheel moulding the swift revolving clay by the natural curves of his hands. At the back of the houses, which form the low irregular street, there are two or three looms at work in blue and scarlet and gold, the frames hanging between the acacia trees, the yellow flowers of which drop fast on the webs as they are being woven. In the street the brass and copper smiths are hammering away at their pots and pans; and further down, in the verandah of the rich man's house, is the jeweller working rupees and gold mohrs into fair jewelry, gold and silver earrings, and round tires like the moon, bracelets and tablets and nose rings, and tinkling ornaments for the feet, taking his designs from the fruits and flowers around him, or from the traditional forms represented in the paintings and carvings of the great temple, which rises over the grove of mangoes and palms at the end of the street above the lotus-covered village tank. At half-past three or four in the afternoon the whole street is lighted up by the moving robes of the women going down to draw water from the tank, each with two or three water jars on her head; and so, while they are going and returning in single file, the scene glows like Titian's canvas, and moves like the stately procession of the Panathenaic frieze. Later the men drive in the mild grey kine from the moaning plain, the looms are folded up, the coppersmiths

are silent, the elders gather in the gate, the lights begin to glimmer in the fast-falling darkness, the feasting and the music are heard on every side, and late into the night the songs are sung from the Ramayana or Mahabharata. The next morning with sunrise, after the simple ablutions and adorations performed in the open air before the houses, the same day begins again. This is the daily life going on all over Western India in the village communities of the Dakhan, among a people happy in their simple manners and frugal way of life, and in the culture derived from the grand epics of a religion in which they live and move and have their daily being, and in which the highest expression of their literature, art, and civilisation has been stereotyped for 3,000 years.

But of late years these handicraftsmen, for the sake of whose works the whole world has been ceaselessly pouring its bullion for 3,000 years into India, and who, for all the marvellous tissues and embroidery they have wrought, have polluted no rivers, deformed no pleasing prospects, nor poisoned any air; whose skill and individuality the training of countless generations has developed to the highest perfection; these hereditary handicraftsmen are being everywhere gathered from their democratic village communities in hundreds and thousands into the colossal mills of Bombay, to drudge in gangs, for tempting wages, at manufacturing piece goods, in competition with Manchester, in the production of which they are no more intellectually and morally concerned than the grinder of a barrel organ in the tunes turned out from it.

I do not mean to depreciate the proper functions of machines in modern civilisation, but machinery should be the servant and never the master of men. It cannot minister to the beauty and pleasure of life, it can only be the slave of life's drudgery; and it should be kept rigorously in its place, in India as well as England. When in England machinery is, by the force of cultivated taste, and opinion, no longer allowed to intrude into the domain of art manufactures, which belongs exclusively to the trained mind and hand

of individual workmen, wealth will become more equally diffused throughout society ; and the working classes, through the elevating influence of their daily work, and the growing respect for their talent and skill and culture, will rise at once in social, civil, and political position, raising the whole country, to the highest classes, with them ; and Europe will learn to taste, of some of that content and happiness in life which is to be still found in the pagan East, as it was once found in pagan Greece and Rome.

The village communities have been the stronghold of the traditional arts of India ; and where these arts have passed out of the villages into the wide world beyond, the caste system of the Code of Manu has still been their best defence against the taint and degradation of foreign fashions. The typical Hindu village consists exclusively of husbandmen ; but as agriculture and manufactures cannot exist without each other, the village was obliged to receive a number of artisans as members of its hereditary governing body. But they are all "strangers within the gate," who reside in the village solely for the convenience of the husbandmen, on a sort of service contract. It is a perpetual contract, but in the lapse of 3,000 years, the artisans have constantly terminated their connexion with a village, or have had to provide for sons in some other place, and they at once sought their livelihood in the towns which gradually began to spring up everywhere round the centres of government, and of the foreign commerce of the country. It is in this way that the great polytechnical cities of India have been formed. Community of interests would naturally draw together the skilled immigrants of these cities in trades-unions ; the bonds of which in India, as was also the case in ancient Egypt, are rendered practically indissoluble by the force of caste. We learn from the Bible that already in the earliest times among the Hebrews numerous trades had developed into separate callings, such as the goldsmiths, braziers, locksmiths, carpenters, masons, potters, weavers, and fullers ; but it is not until after the Captivity,

that we find trades-unions flourishing among the Jews who had settled in Egypt, the land of caste. In the Jews' synagogue at Alexandria, which was so large that the word Amen, at the end of each prayer, had to be signalled by the reader to the vast congregation, all the different trades-unions sat apart from each other, and the workers in gold and silver, the coppersmiths and braziers, the nail and needle-smiths, the potters, carpenters, masons, and weavers, had each their appointed seats. The spirit of trades-unionism thus spread from Egypt among the Jews of Palestine, who at last carried it with them into every country in Europe. In India these trade guilds have also existed from the very beginning of Hindu civilisation. In the nineteenth chapter of the second section of the Ramayana, or Ayodhya-Kanda—"Scenes in Ayodhya"—the inhabitants of that city are represented as going out in procession with Bharata to seek Rama in the order of the trade guilds: jewellers, potters, ivory-workers, perfumers, gold-smiths, weavers, carpenters, braziers, painters, musical instrument-makers, armourers, curriers, blacksmiths, coppersmiths, makers of figures, cutters of crystals, glassmakers, inlayers, and others; with the "chief of a guild" bringing up the rear. It is just such a list as might be prepared from a census return of the inhabitants of Ahmedabad in Western India at the present day. It is almost identical with the list of the trades as given in Surgeon James Taylor's *Sketch of the Topography and Statistics of Dacca*, published in 1840 [Calcutta].

The trade guilds of the great polytechnical cities of India are not, however, always exactly coincident with the sectarian or ethnical caste of a particular class of artisans. Sometimes the same trade is pursued by men of different castes, and its guild generally includes every member of the trade it represents without strict reference to caste. The government of the guilds or unions is analogous to that of the village communities and castes, that is, by hereditary officers. Each separate guild is managed by a court of aldermen or *mahajans* [literally

"great gentlemen"]. Nominally it is composed of all the freemen of the caste, but a special position is allowed to the *seths*, lords, or chiefs of the guild, who are ordinarily two in number, and hold their position by hereditary right. The only other office-bearer is a salaried clerk or *gumasta*.

Membership in the guild is also hereditary, but new-comers may be admitted into it on the payment of an entrance fee, which in Ahmedabad amounts to 2*l.* for papermakers, and 50*l.* for tin-smiths. No unqualified person can remain in or enter a guild. It is not the practice to execute indentures of apprenticeship, but every boy born in a working caste of necessity learns his father's handicraft, and when he has mastered it, at once takes his place as an hereditary freeman of his caste or trade guild; his father, or, if he be an orphan, the young man himself, giving a dinner to the guild on the occasion. In large cities the guilds command great influence. The *Nagar-Seth*, or city lord, of Ahmedabad, is the titular head of all the guilds, and the highest personage in the city, and is treated as its representative by the Government. In ordinary times he does not interfere in the internal affairs of the guilds, their management being left to the chief alderman of each separate guild, called the *Chautano Seth*, or "lord of the market."

Under British rule, which secures the freest exercise of individual energy and initiative, the authority of the trade guilds in India has necessarily been relaxed, to the marked detriment of those handicrafts the perfection of which depends on hereditary processes and skill. The overwhelming importations of British manufactures also is even more detrimental to their prosperity and influence, for it has in many places brought wholesale ruin on the hereditary native craftsmen, and forced them into agriculture and even domestic service. But the guilds, by the stubborn resistance, further stimulated by caste prejudice, which they oppose to all innovations, still continue, in this forlorn way, to serve a beneficial end, in maintaining, for probably another

generation, the traditional excellence of the sumptuary arts of India, against the fierce and merciless competition of the English manufacturers. The guilds are condemned by many for fixing the hours of labour and the amount of work to be done in them by strict bylaws, the slightest infringement of which is punished by severe fines, which are the chief source of their income. But the object of these rules is to give the weak and unfortunate the same chance in life as others more favored by nature. These rules naturally follow from the theocratic conceptions which have governed the whole organisation of social life in India: and it is incontrovertible that the unrestricted development of the competitive impulse in European life, particularly in the pursuit of personal gain, is absolutely antagonistic to the growth of the sentiment of humanity, and of real religious convictions among men.

The funds of the guilds of Western India, where they prevail chiefly among the Vaishnavas and Jainas of Gujarat, are for the greater part spent on charities, and particularly on charitable hospitals for sick and helpless domestic animals: and in part also on the temples of the Maharajas of the Wallabacharya sect of Vaishnavas, and on guild feasts. A favorite device for raising money is for the men of a craft or trade to agree on a certain day to shut all their shops but one. The right to keep open this one is then put up to auction, and the amount bid goes to the guild fund. In purely agricultural districts the trades are not organised in guilds, and the title *mahajan* is applied simply in social courtesy to every member of the Vania ["Banyan"], Shravak [Jaina, lay priest] and Soni [goldsmith] castes. In districts where there are a considerable number of craftsmen, but all of one caste, the head of the caste acts also as chief of the guild.

It is under this system that the sumptuary arts of India, as distinguished from its village arts, were fostered and sustained, until at length the whole bullion of the Western nations of antiquity and mediæval times was poured into the East in exchange for them. It is impossible to overestimate the effect of their former importation

into the West on the art manufactures of Europe : and by a natural reaction it is in its sumptuary productions that the influence of modern commerce and the British conquest on India is most explicitly and instructively shewn.

It has, however, been through the encouragement given by the great native princes and chiefs, and the cultivated taste of the common people, that the sumptuary arts of India have been brought to such artistic perfection. From the *Ayin Akbari or Institutes of the Emperor Akbar* [A.D. 1556—1605], written by Abdul Fazl, Akbar's great minister, we learn that the Mogol emperors of Delhi maintained in their palaces skilled workmen from every part of India. It is said that Akbar took a great delight in painting, and had in his service a large number of artists, in order that they "might vie with each other in fame, and become eminent by their productions." Once a week he inspected the work of every artist, when in proportion to their individual merits they were honored with premiums, and their regular salaries were increased. In the armoury also the emperor personally superintended the preparation of the various weapons which were forged and decorated there, in every stage of their manufacture. In the workshop of the imperial wardrobe the weavers and embroiderers of every country were to be found, and whatever was made by them was carefully kept, and those articles of which there thus came in time to be a superfluity were given away in presents of honour. Through the attention of the emperor the manufacture of various new fabrics was established at Delhi. The skill of the imperial manufacturers increased also with their number, so that the cloths of Persia, Europe, and China, became drugs in the market. The emperor was very fond of woollen stuffs, particularly shawls; and the *Ayin Akbari* gives a list of all the varieties made in the palace, which were classified according to their date, value, colour, and weight. He had a vast establishment of jewellers, inlayers in gold, silver, crystal, and carnelian; damascene workers, chiefly for ornamenting arms; enamellers;

plain workers in gold and silver, and pierced workers; embossers; "inlayers with little grains of gold," whose art will be further noticed in connexion with the modern jewelry of Delhi; makers of gold and silver lace [*simbast*] for sword-belts, &c.; engravers and workers in a sort of *nillo*; stone engravers, and lapidaries; and other artists. Sir John Chardin, who travelled in the East from 1664 to 1670, in his *Journal du Voyage* [London 1686; Amsterdams 1711], tells us that the kings and nobles of Persia also then maintained, as they do now, manufacturers of all the arts and trades in their "*carconés*" [*karkhanas*] or workshops. He compares these factories to the galleries of the Grand Duke of Florence, and of the Louvre. "They entertain in these places a large number of excellent master-workmen, who have a salary and daily rations for their lives, and are provided with all the materials for their work. They receive a present, and an increase of salary, for every fine work they produce." Their appointments were hereditary. This was formerly, and is now also, the case in India. In the India Museum collection of jade there is a large engraved bowl, on which a family of lapidaries in the employ of the emperors of Delhi was engaged for three generations. It is only in this way that artistic excellence in works of industry can ever be attained, and it is thus that the finest enamels, and damascened work, and shawls, are still produced in India, in the royal factories respectively of Jaipur, Hyderabad, and Srinagar.

Every house in India is likewise a nursery of the beautiful. In the meanest village hut the mother of the family will be found with her daughters engaged in spinning or weaving; and in the proudest native houses of the great polytechnical cities, the mistress, with her maid-servants, may be seen at all hours of the day embroidering cloth in colored silks, and silver, and gold thread; reminding the visitor of similar household scenes in ancient Rome before slaves came, during the pampered period of the Cæsars, to be employed in such work. There is thus a universally diffused popular appreciation of technical skill and taste in workmanship,

which must necessarily have had its effect in promoting the unrivalled excellence of the historical art handicrafts of India.

Besides the village and sumptuary arts there are, as already observed, the savage arts of the wild tribes ; and thus within the limits of India proper, that is of the basins of the Indus and Ganges, and the whole peninsula southward from the Himalayas to Cape Comorin, we have in almost every province the arts of the Kulis, Gonds, Konds, Bhils, and other negroid aborigines, of the Dravidian immigrants into Southern, and the Indo-Chinese immigrants into Eastern India, and of its Persianised Afghan, and Mongol [Turkoman], conquerors throughout Hindustan, and the more accessible provinces of the Dakhan. Yet all, whether savage, Brahmanical, or Mahomedan, are essentially of one generic style, which has been impressed upon them by the pervading intellectual superiority of the Vedic Aryas, and which distinguishes them in every species and variety as characteristically Indian arts.

GOLD AND SILVER PLATE.

THE only notice of gold plate in the Rig-Veda is an allusion to golden cups; but the references to jewelry are so numerous, that it is evident the precious metals must have been known and used in India for drinking vessels, and other domestic utensils from the first settlement of the Aryas in the Panjab. Gold is indeed a favorite simile in the Rig-Veda for the rising sun; and the wheels and yokes of carriages are described as made of gold. The Ramayana and Mahabharata offer abundant evidence that at the period when they were compiled in their present form the Hindus were perfectly familiar with works executed in gold on the grandest scale. Unfortunately no objects in the precious metals that can be claimed as authentic examples of ancient Indian art have survived the wreck of time in India; unless any may still be hidden within the shrines of some of the more sequestered of the great idol temples.

The oldest examples of really ancient gold and silver work found on Indian soil are the gold casket [Plate 1] and silver patera [Plate 2] belonging to the India Office library, which have been lent to the Science and Art Department for exhibition in the India Museum at South Kensington. This gold casket is an object of the highest interest in connexion with the history of Indian art. It was found by Mr. Masson about forty years ago in one of the Buddhist topes, built on the sandstone

slopes which stretch away westward from Jellalabad in the Cabul valley toward the Lughman hills. It is fully described and figured in Wilson's *Ariana Antiqua*, 1841, and it is figured also in Mrs. Spiers's *Life in Ancient India*, 1856. The tope in which it was found is known as No. 2 of Bimaran. Dr. Honigberger first opened this monument, but abandoned it, having been forced to hastily return to Cabul. Mr. Masson continued Honigberger's pursuit, and in the centre of the tope discovered a small apartment, constructed, as usual, of squares of slate, in which were found several most valuable relics. One of these was a good-sized globular vase of steatite, which, with its carved cover or lid, was encircled with inscriptions, scratched with a style, in Bactro-Pali characters. On removing the lid, the vase was found to contain a little fine mould, mixed up with burnt pearls, sapphire beads, &c., and this casket of pure gold, which was also filled with burnt pearls, and beads of sapphire, agate, and crystal, and burnt coral, and thirty small circular ornaments of gold, and a metallic plate, apparently belonging to a seal, engraved with a seated figure. By the side of the vase were found four copper coins, in excellent preservation, having been deposited in the tope freshly minted. They were the most useful portion of the relics, for they enabled Professor H. H. Wilson to assign the monument to one of the Azes dynasty of Græco-Barbaric kings who ruled in this part of India about 50 B.C. The upper and lower rims of the casket are studded with Balas rubies, in alternation with a raised device resembling the *sri-vatsa*, or curl on the breast of figures of Vishnu and Krishna; and between these jewelled lines the whole circumference of the casket is divided into eight niches, enshrining four figures represented twice over. The niches are formed by a series of flat pilasters supporting finely-turned arches, circular below and peaked above, between which are figures of cranes with outstretched wings. The whole is executed in the finest style of beaten [*repoussé*] goldsmiths' work. Like so many of the Buddhistic remains found in the Panjab and

Afghanistan it is strikingly Byzantine in general character ; and the storks or cranes with outstretched wings in the spaces between the arches in which the apostle-like figures are niched, recall at once the figures of angels carved in the spaces between the arches in Christian churches. Yet in drawing attention to this remarkable relic in a letter in the *Pall Mall Gazette* of June 3, 1875, written on the subject of Dr. Leitner's collection of Buddhistic sculptures from the Panjab, which were then on exhibition at the Albert Hall, I maintained that it afforded clear evidence of the influence of Alexander's invasion on the arts of India. The Greeks had conquered all this part of India, and established a monarchy there, and issued a coinage, which was at first purely Greek in its character. In *The Indian Travels of Apollonius of Tyana* [Priaulx], about A.D. 50, he is related to have found Phraotes, who ruled over what of old was the kingdom of Porus, not only speaking Greek, but versed in all the literature and philosophy of Greece. The villagers of a neighbouring kingdom, somewhere in the Panjab, are also said to have still used the Greek language. There may be the grossest exaggeration in all this, but it proves at least that such statements were the commonplaces of Indian travel in the first century of our era. The conclusion therefore is that the remarkable European character of the Buddhistic sculptures in the Panjab and Afghanistan, is due, not to Byzantine, but to Greek influence ; and it is confirmed by the discovery of this casket. They are unmistakably Buddhistic sculptures, and therefore may date from B.C. 250 to about A.D. 700 ; and any of them which are later than the fourth century, A.D. may have been executed under Byzantine influence. But the date of this golden casket proves that its Byzantine and mediæval look is due to Greek inspiration ; and the probability is that the Buddhistic remains existing in the neighbourhood of Peshawar in the Panjab were also directly influenced by Greek art ; and may, some of them, therefore, be of an earlier date than is usually admitted. Dr. Leitner was the first to insist on describing

them as Græco-Buddhistic sculptures.¹ Their resemblance to the Byzantine ivories, as of this casket to Byzantine goldsmiths' work, is probably due to their having been executed by Indian workmen from Greek designs or models. It will be interesting to observe that the peaked arches represented on the casket are identical in character with the peaked arches of the upper part of the piazza of St. Mark's at Venice, which was built I believe in 1592. The bottom of the casket is ornamented with a beautiful conventional representation of the sacred lotus with eight petals, which are pointed like the arches of the eight niches above them.

The silver patera has been fully described and figured by me in vol. xi, New Series, of the *Transactions of the Royal Society of Literature*. It was also described and figured by Prinsep in vol. vii. of the *Transactions of the Asiatic Society of Bengal*; and is mentioned and badly figured in Sir Alexander Burnes' *Cabool*, 1843. Colonel Yule gives a woodcut of it in the second edition of his *Marco Polo*. Sir Alexander Burnes figures along with it a second silver dish of Persian work, representing Yezdigird I [A.D. 632], which is described by General Cunningham in vol. x. of the

¹ I have great pleasure in publishing the following extract from a letter written to me by Mr. William Simpson since the publication of the earlier copies of this *Handbook* :—

"At p. 146, vol. i. you give to Dr. Leitner the whole credit of being the first to declare the existence of Greek Art in the remains of the Indus region. I have a claim dating long before that of Leitner's, and mine is not exactly the first. I post with this a copy of a paper I read in January last, to the Royal Institute of British Architects, in which you will see the details so far as my reading has gone. The reference to Elphinstone's History is vol. i. p. 107. Wilson's remarks on that you will find in the *Ariana Antiqua*, p. 31. Cunningham's small book only refers to Cashmere. I visited the Manikyala Tope in February 1860, and my judgment that it contained in its art an influence derived from Greek or classic sources was founded on the sketches I then made. Next year I sketched all the Cashmere remains, and the details on them confirmed the judgment I formed from the Manikyala monument. I have all my drawings here on which I based my opinions. It was ten years after that when Dr. Leitner came home with his interesting collection of 'Græco-Buddhistic' sculptures."

Journal of the Asiatic Society of Bengal. This second dish is said to be still in the possession of the Burnes family, and would be an invaluable addition to the few objects of historical Indian art in the India Museum. The patera belonging to the India Office Library had been an heirloom in the family of the Mirs of Badakshan, who claim to be descendants of Alexander the Great; and it had been sold by them in their extremity, when they were conquered by Mir Morad Bey of Kunduz, to Atmaram his Dewan Begi. It was from Atmaram that Dr. Lord obtained it, and the Persian dish also; and he presented the patera to the India Museum, and the Persian dish to Sir Alexander Burnes. The diameter of the patera is 9 inches, its depth $1\frac{5}{8}$ inches, and its thickness $\frac{1}{8}$ to $\frac{1}{16}$ and $\frac{1}{20}$ of an inch; and its weight 29 oz. 5 dwt. Troy. It represents in high relief, with all the usual adjuncts of classic mythology, the procession of Dionysos. The god himself sits in a car drawn by two harnessed females, with a drinking cup in his extended right hand, and his left arm resting on the carved elbow of the seat on which he reclines, or it may be the shoulder of Ariadne. In front of the car stands a winged Eros holding a wine-jug in his left hand, and brandishing in his right a fillet, the other end of which is held by a flying Eros. A third Eros is pushing the wheel of the carriage, behind which follows the dancing Heracles, recognised by the club and panther's skin. Over all is a rude and highly conventionalised representation of a clustering vine; and in the lower exergue a panther is seen pressing its head into a wine-jar, placed between the representations of some tree, possibly the pomegranate, arranged symmetrically on either side of it.

The figures, which shew traces of gilding, are all encrusted on the surface of the patera, and the heads of the Dionysos and Heracles are both wanting. It is in the style of the later Roman and Byzantine ivories; and on the face of it, from the thickness of the silver, especially in the raised figures, its debased drawing, and slovenly workmanship, it belongs to an age when Greek art

had under the various degrading influences to which it was exposed during the Roman and Byzantine period gradually become barbarised. I have no doubt that this patera is of Eastern workmanship, possibly of colonists from Rome; and we may conjecture it to have been taken among the spoil when Antioch fell to the Persians, A.D. 540. It may, however, be ancient Indian work of Bactria of the same age as the Buddhist sculptures of Peshawar, which it closely resembles in its composition and modelling.

The Panjab has ever maintained a high reputation for the excellence of its gold and silver work. The best known is the parcel gilt silver work of Cashmere, which is almost confined to the production of the water-vessels or *sarais*, copied from the clay goblets in use throughout the northern parts of the Panjab. Their elegant shapes and delicate tracery, graven through the gilding to the dead white silver below, which softens the lustre of the gold to a pearly radiance, gives a most charming effect to this refined and graceful work. It is an art said to have been imported by the Mongols, but influenced by the natural superiority of the people of the Cashmere valley over all other Orientals in elaborating decorative details of good design, whether in metal work, hammered and cut, or enamelling, or weaving. Cups are also made in this work, and trays of a very pretty four-cornered pattern, the corners being shaped like the Mahomedan arch. Among the Prince of Wales' Indian presents there is a tray with six cups and saucers in "ruddy gold," which is an exquisite example of the goldsmith's art of Cashmere. There is also in the Prince of Wales' collection a remarkable candelabrum, in silver gilt, from Srinagar, shaped like a conventional tree, and ornamented all over with the crescent and flame device, and hanging fishes, its design being evidently derived through Persia from a Turkoman original. The candelabra seen in Hindu temples constantly take this tree form, without the addition of the symbols of the sky and ether; and trees of solid gold and silver, representing the mango

or any other tree, and of all sizes, are common decorations in Hindu houses. Often they are made of silk, feathers, and tinsel, and they always recall to mind the *terpole*, or golden vine made in ancient times by the goldsmiths of Jerusalem. Josephus [*Antiquities*, xiv 3] informs us that when Pompey came to Damascus, Aristobulus sent him out of Judæa a great present, which was a golden vine or garden, which the Jews called *terpole*, the "delight."

Plates 3 and 4 are examples of unusual forms of Cashmere work, the latter in parcel gilt silver, and the former in "ruddy gold." This "ruddy gold" is used in India only in Cashmere, and in Further India in Burma. All over India elsewhere gold is stained deep yellow, except in Sindh, where the goldsmiths and jewellers sometimes also give it a singular and highly artistic tinge of olive-brown. The Sindh goldsmiths' work is very beautiful, and of uncontaminated indigenous design, but is seldom seen excepting at Exhibitions.

The silver *sarais* made at Lucknow [Plates 5 and 6] are very like those of Cashmere, and are evidently derived from them, those of Cashmere being distinguished by the introduction of the shawl cone pattern in the chasing. Lucknow was once famous for its vessels of mixed gold and silver, but since the abolition of the native court of Oudh, their production, as of all the other sumptuary arts of this once royal and renowned polytechnical city, has steadily declined.

A considerable quantity of gold and silver plate, of good original design and excellent workmanship, is now made at Dacca in Bengal, chiefly for export to Calcutta. At Chittagong also, in the same Presidency, the manufacture of vessels in gold and silver is a growing industry; but the gold and silversmiths there can only execute plain work to pattern, and do not seem to have any designs of their own.

In the Central Provinces Chanda was formerly distinguished for its workers in the precious and baser metals, but much of

their fame has now been lost, owing to the decreased demand for their wares under British rule. The district still, however, possesses good goldsmiths and silversmiths, whose work is marked by the strongest local character.

In the Bombay Presidency the plate of Katch and Gujarat has long been noted. Sir Seymour Fitzgerald has lent the India Museum a bowl and tray [Plate 7] of the old pierced parcel gilt work [the *opus interrasile* of the Romans] of Ahmedabad. The form of the bowl is European, but derived, as is proved by the ornamentation of the tray, though Persia; while the Hindu influence is clearly shewn in the character which the foot of the bowl has taken in the hands of the Ahmedabad artist. It is a noble example of the grand style of goldsmiths' work executed in India in past times, for this bowl and tray are not less than 150 or 200 years old. The silver gilt vase, and silver gilt and jewelled coffee pot, illustrated in Plates 8 and 9, are known to be not less than 200 years old, having been nearly all that time in the possession of the family of the native gentleman of Gujarat from whom they were obtained. They are said to have been made by a Jaina goldsmith. The coffee-pot is evidently derived from a Mongol [Turkoman] original, and the vase from a Greek, or possibly Sassanian; and both illustrate the natural capacity for assimilating foreign forms possessed by the Hindus, when left to deal with them in their own way. It is their patient workmanship apparently which is the source of this happy power. Working in gold and silver is still carried on in every district of Gujarat, in all the big towns and large villages, and especially at Dholka, Viragram, and Ahmedabad. The beautiful silver and gold *repoussé* work of Katch is of Dutch origin, but has been perfectly assimilated to the native style of the province, and is much sought after. The goldsmiths of Katch are also very skilful in decorating arms in silver, and parcel gilt, and gold: and colonies of them are established all over Gujarat and Kathiwar.

Lord Northbrook exhibited at Paris some fine Katch *repoussé* work by Umersi Manji, a goldsmith of Katch Buj. In the city of Bombay there are 2,875 jewellers, of the different Indian nationalities of the Presidency, who find constant and lucrative employment.

Everywhere in Madras gold and silver, and indeed all the metals, are superbly wrought. Among the Prince of Wales' presents is a shrine screen [Plate 8 *bis*] of old Madras pierced and hammered silver, which is a wonderful example of manipulative dexterity. Three other illustrations are given [Plates 9 *bis*, 10, and 11] from the Prince's presents of Mysore gold dishes. Plate 9 *bis* is a rare example in Indian work of properly applied ornamentation. The rim and cover of the tray are elaborately enriched with embossed flowers and leaves; while the bottom is left plain, excepting the well proportioned border, and a centre panel of flowery geometrical design, which is enchased, so as not to interfere with its necessary flatness of surface. Plates 10 and 11, although purely Hindu in detail, seem to be Saracenic in general style, and in the subordination of the decoration both to form, and to the spacing of the general design. In the characteristic *swami* work of the Madras Presidency the ornamentation consists of figures of the Puranic gods in high relief, either beaten out from the surface, or affixed to it, whether by soldering, or wedging, or screwing them on. The Greeks called the art of working metal in relief *τοπερτυχή*, and the artists of such work in Rome went by the name of *crustarii*, from the *crusta*, or small ornaments in relief, with which they encrusted their work; while the larger reliefs which they fastened on in such a way that they could be removed at pleasure, as can be done with the larger of these Madras *swami* figures, were called *emblemata*. The large silver presentation shield in the India Museum, covered in this way with figures of the Puranic gods, is an amazing production of misapplied official energy. The *emblemata* are

admirably wrought, but the shield on which they are fastened is evidently of Anglo-Indian design; and the effect produced is most discordant and displeasing.

The Indian goldsmith has sometimes to execute his work on a truly colossal scale, reminding one of the gold work done for Solomon's temple and house. If a Hindu has to undergo purification, one of the necessary rites is to step through the *yonî*, the mystic symbol of female power. This is often done by sitting for an instant on the scar of a tree, bearing a similitude to the sacred symbol. Sometimes the scar forms a true matrix, or the cavity may penetrate the whole thickness of the tree, when the Hindu will step in and out of it, or what is holiest, will pass right through it, in sign of his regeneration. But when the two Brahmans whom Raganatha Rao [Ragoba] the Maratha Peishwa sent to England in 1780 returned to India, they were compelled to pass through a *yonî* made of the finest gold before they could be readmitted into caste. Ragoba himself, on his defeat and expulsion from his capital, had a cow of gold made, and was passed through it, in the hope of bettering his fortune. The King of Travancore about the same time, wishing to atone for all the blood he had spilt in his wars, was persuaded by the Brahmans that it was necessary for him to be born again; when a cow of gold was made of immense value, through which the King, after lying in it for some time, was passed, regenerated, and freed from all the burden of the crimes of his former life. It is said that to this day the rajas of Travancore, on succeeding to the throne, all go through the same ceremony, and thereby are elevated to the status of Brahmans.

METAL WORK IN BRASS, COPPER AND TIN.

WATER vessels or *lotas*, dishes, bowls, candlesticks, images of the gods, temple bells, sacrificial spoons, censers, and other sacred and domestic utensils in brass and copper are made all over India, and of the same patterns as we find in representations of them on the oldest Buddhist sculptures and cave-paintings. These metal vessels in a native Indian household supply the place of porcelain, glass and silver plate in a European family. Hindus use brass vessels, and Mahommedans copper, except for drinking-cups, which are generally of silver. The *lota* is the globular ewer, sometimes melon-shaped, flattened from top to bottom and very rarely from side to side, universally used in ceremonial and other ablutions, and its name is the same word as *lotus*, the water-lily, and comes from the same root as the Latin *lotus*, washed, and the English, lotion, a wash. It is found plain, chased, graven, and encrusted. The most interesting of all known *lotas* is one in the India Museum [Plate 12] discovered by Major Hay, in 1857, at Kundlah in Kulu, where a landslip had exposed the ancient Buddhist cell in which this *lota* had been lying buried for 1,500 years; for it is attributed by Oriental scholars to the date A.D. 200-300. It is exactly of the shape now made, and is encased all round with a representation of Gautama Buddha, as Prince Siddhartha, before his conversion, going on some high procession. An officer of state, on an elephant, goes before; the minstrels, two damsels, one playing on

a *vina*, and the other on a flute, follow after ; in the midst is the Prince Siddhartha, in his chariot drawn by four prancing horses, and guarded by two horsemen behind it ; all rendered with that gala air of dainty pride, and enjoyment in the fleeting pleasures of the hour, which is characteristic of the Hindus to the present day, as if life were indeed

“ musical as is Apollo's lute,
And a perpetual feast of nectared sweets,
Where no crude surfeit reigns.”

The copper statue of Buddha at Sultanganj¹ [Royal Asiatic Society of Bengal Vol. XXX, 360] is the largest metal work of ancient times extant in India, and a monument of the early proficiency of the Hindus in melting and casting metal. The iron pillar, which stands in the centre of the courtyard of the Kutub mosque at old Delhi, is a solid shaft of iron, 23 feet 8 inches in total height, and 16·4 inches in diameter at the base, and 12·05 inches at the capital, which is 3½ feet high. Mr. Fergusson assigns to it the mean date of A.D. 400, and observes that it opens our eyes to an unsuspected state of affairs to find the Hindus at that age capable of forging a bar of iron larger than any that has been forged in Europe up to a late date, and not frequently even now. After an exposure of fourteen centuries, it is still unruined, and the capital and inscription are as clear and as sharp as when the pillar was first erected. A cast of it is shewn in the India Museum. The beautiful hammered and perforated brass gates of the tomb of Shah Alum at Ahmedabad are another notable sample of the great skill of the natives of Gujarat in metal work.

Mr. Baden Powell in his *Handbook on the Manufactures and Arts of the Punjab* (Lahore, 1872), gives a complete list, with their native names and uses, of the commoner brass and copper

¹ Now in private hands in Birmingham.—See Fergusson, *History of Indian and Eastern Architecture*, p. 137.

utensils made at Karnal, Amritsa and Lahore. They form the staple of the work in metals of the Panjab, and in every large town he says great quantities of metal vessels, drinking cups, cooking pots, and lamps, in short all articles of household use, are made for local consumption. Amritsar, Ambala, Ludhiana, Jalandhar, all export brass vessels into the hills round the Panjab, and up the Cabul valley into Afghanistan. The high brass tree-like candelabra, with a number of branches bearing little lamps filled with oil, and having a wick in each, are a marked feature in great houses in Lahore, and are known by the name of *char-divas*, i.e. lamps with four wicks [literally "lights," the word *diva* meaning both light and God].

In Cashmere tin is soldered on copper which has been previously deeply graven over with a diffused floral design, the sunken ground of which is then filled in with a black composition, something after the manner of niello. This pretty work, from Cashmere, is very rare in England, but Lord Northbrook exhibited a variety of it in three dishes at the Paris Exhibition of 1878. They are studded all over with little raised flowers, which shine like frosted silver out of a groundwork of blackened foliated scrolls, which are traced so delicately as to look like the finest Chantilly lace.

At Moradabad, in the North West Provinces, tin is soldered on brass, and incised through to the brass in floriated patterns, which sometimes are simply marked by the yellow outlines of the brass [Plate 12 *bis*] and at others [Plate 13] by graving out the whole ground between the scrolls, and filling it in with a blackened composition of *lac*, as is done in Cashmere.

Benares, in the North-Western Provinces, is the first city in India for the multitude and excellence of its cast and sculptured mythological images and *emblemata*, not only in brass and copper, but in gold and silver, and also in wood and stone and clay. These images of the gods are not made by a separate caste, but the carpenters and the masons respectively make the large wooden

and stone idols set up in the temples, the potters the clay idols consumed in daily worship, and the braziers, coppersmiths, and goldsmiths the little images in brass and copper, mixed metal, and gold and silver which are always kept in private houses. Brass is largely used in their manufacture, alloyed with six other metals, gold, silver, iron, tin, lead, and mercury, making with the copper, and the zinc of the brass, a mixture of eight metals, which is deemed a perfect alloy, and very highly prized. Idols of pure gold and silver are also made, and in the Sastras great praise is bestowed on those who worship graven images of these precious metals. The larger idols are always cast in moulds, and afterwards finished with the chisel and file. The gold images of Durga, Lakshmi, Krishna, Radha, and Saraswati kept in private houses and worshipped daily, must not be less than one *tola* [nearly half an ounce] in weight, and they generally weigh three or four *tolas*. The images of Shitala [the goddess of small-pox] are always of silver, and weigh ten or twelve *tolas*. The images of Siva in his *lingam* form are made of an amalgam of mercury and tin, and are esteemed most sacred. They are always very small, and are kept in all houses and used in the daily worship. Copper images of Surya, and of Siva riding on Nandi, and also, in many parts of India, of the serpent *Naga*, are kept in all houses and are worshipped daily. Brazen images of many of the gods are also kept in private houses and daily worshipped: and images of Radha, Durga, Lakshmi and Siva in mixed metal. The images of the gods made of this perfect alloy may also be worshipped either at home or in the temples. The images of all the gods and goddesses are graven in stone, but they are generally worshipped only in the temples; only a few very small ones being found in private houses, the greater number of those used in domestic worship being of the *lingam* form of Siva. The stone images seen in Bengal are generally of black marble, but there are some at Benares which are white. Wooden images are never kept in private houses, but only in the temples. The *nimba* tree, *Melia Azadirachta*, furnishes the

temple images of Vishnu, Durga, Radha, Lakshmi, Siva, Garuda, and others. The mendicant followers of Vishnu always carry about a wooden image of him two cubits high. All images of clay are thrown into the river after being worshipped, and have therefore to be renewed daily. They are generally two cubits high. The figures made of Karttikeya for his annual festival in Bengal are often twenty-seven feet high. An immense manufacture of all these idols, and of sacrificial utensils, is carried on in Benares. The industry has sprung up naturally from the services of the numerous temples of this city, and has converted the precinct of every temple into an ecclesiastical bazaar. It was in this way that the seats of those who sold doves for sacrifice, and the tables of the bankers [*soukars* in India] who exchanged unholy for holy coins, were gradually intruded into the outer court of the Temple at Jerusalem; and that the "booths of Bethany" rose beneath the green branches on the opposite slopes of the Mount of Olives. Miss Gordon Cumming, who has given a most graphic account of the temples, and temple services at Benares, says that it is impossible to walk through the bazaars of this city without recalling the descriptions of the vessels of the Temple of Jerusalem: of "the cauldrons, pots and bowls; the shovels, the snuffers, and the spoons, the censers, the basons, the lamps, the candlesticks, and all manner of things to be made either of gold, or of bright brass, which might be continually scoured. Here in the open sunlight are stalls heaped up with all sorts of brass work for the use of the worshippers. Incense burners and curious spoons, basons and lamps, pots and bowls, and a thousand other things of which we knew neither the name nor the use, but which the owners were continually scouring until they gleamed in the sun." Amid these busy, noisy shops stands the red sandstone temple of Durga, elaborately carved from base to pinnacle, and alive with monkeys: and down the next street, another, dedicated to the same goddess, is full of brilliant peacocks; while above all else rise the glittering domes of the great golden temple of Siva, which

is for miles around the cynosure of the pilgrims proceeding toward the sacred city from every part of India. The narrow streets are full of beautiful white cows adorned with garlands of flowers, and having the *trisula* of Siva stamped on their hind-quarters: and every street leads down to the Ganges and the thousand temples and pavilions clustered along its banks.

A large quantity of the exported domestic brass work of Benares has in recent years found its way into this country. It is very rickety in its forms, which are chased all over in shallow, weak patterns; and it fails altogether to please owing to its excessive ornamentation. In the trays particularly all appearance of utility is destroyed by the unsuitable manner in which decoration is applied over their whole surface.

In Oudh, the town of Bandhua enjoys a local reputation for its metal vessels.

In Bengal what are known as *kansha* plates are a specialty of Bardwan and Midnapur; and several other places in the Bardwan division are noted for their metal pots and pans: and also Nuddea, and Panihatti in the Presidency division. At Nuddea, however, the industry has latterly declined owing to the bankruptcy of the chief manufacturer. In the Chittagong division the village braziers turn out excellent metal work. All sorts of domestic utensils in brass and bell metal are made throughout the Rajshahye division, particularly at Murshedabad and Malda; also at Shahabad in the Patna division; and throughout the Orissa division; in brass and pewter in the Chota Nagpore division; and in iron and brass all over the Dacca division, particularly about Mymensing, where, at Kagmari, brass, and iron, and also white metal work, are produced on a large scale. At Kagmari alone 300 men are employed in the business, and the yearly out-turn is over 150,000 lbs. These wares are always sold by weight, a small fraction over it being allowed for the manufacturer's profit.

In the Central Provinces which are the ancient Gondwana, the

brass work of Nagpur, consisting of *lotas*, *katoris*, and cooking vessels, is distinguished by its pure traditional forms. Brass wares of the same excellence of form are manufactured also a little higher up the Waingunga at Bundhara and Pauni, but more extensively at the former place. The articles produced are cooking utensils, and water vessels of all kinds used by natives, handlamps, candlesticks, and candelabra, drinking cups, bells, and fountains. The braziers there also work in bell metal, pewter, and copper. Excellent brass and copper utensils are made at Brahmapuri in the Chanda district. The town of Chanda itself was formerly distinguished for its workers in the precious and baser metals but much of its fame is now lost. Brass and bell-metal vessels are largely manufactured at Sambulpur in the extreme east, and at Chichli in the Narsingpur district in the north of the Central Provinces. In the wild southern district of Bustar new brass pots are manufactured from old ones by the Ghasias. The hatchets and knives always to be seen in the hands of the people of this district are made at Madder, and other places, on the Upper Godaveri, which bounds the Central Provinces toward the south-west. Steel of excellent quality is forged at Tendukhera in the Narsingpur district, and at Katangi, Jabera, Barela, and Panagar in the Jubbulpur district, along the Nerbudda, which bounds the Central Provinces on the north.

At Dewalghat in Berar [Hyderabad Assigned Districts], not far westward from Bundara, steel of fine quality is forged.

In the Bombay Presidency, Nassik and Poona and Ahmedabad have always been famous for their copper and brass work. Besides the ordinary house pots and cups, the braziers of Ahmedabad make very graceful and delicately cut brass screens [possibly derived originally from the beautiful brass gates of Shah Alum's tomb], and *pandans*, for holding betel [*pan*] leaf, small boxes of very graceful form, covered with the most delicate tracery, and known to Europeans as spice boxes. Their wares belong to two chief classes: the first of copper,

domestic pots, jewelry caskets, and inkstands; and the second of brass, sweetmeat boxes, spice boxes [*pandans*], rings, lamps, idols, and chains. They make their own brass in the proportion of four parts of copper to three of zinc. A good deal of iron work is also done at Ahmedabad. There is a large manufacture of idols in all the metals at Nassik, and Poona. Good brass utensils are also made at Kelshi and at Bagmandli in the Ratnagiri collectorate. Bells for bullocks are a speciality of Sirsangi in the extreme eastern limits of Parasgad in the Belgaum collectorate. The most active industry in the town of Bombay is the manufacture of brass and copper pots and the other utensils in universal use among the natives of India. The Copper Bazaar opposite the Mombadevi Tank [the Mirror of the Goddess of Bombay] is the busiest and noisiest, and one of the most delightful streets in all the native town. Mr. Terry states [Maclean's *Guide to Bombay*] that there are 1,069 coppersmiths, and 1,536 blacksmiths in Bombay.

In the Madras Presidency brass and copper vessels, and also of iron and steel, are made at Maddagiri, Nagamangala, Karatagiri, Magadi, Belúr, Tagari, Sravan, and Channapatna in Mysore. The brass and copper utensils, and brass and copper [and also stone] idols of the Tumkur districts are widely noted. In the Hassan district the Jainas enjoy a monopoly of the manufacture, which employs 1,331 persons, who receive orders from all parts of Southern India. Very good brass work is also made at Nellore; but that of Madura and Tanjore is superior to all, and the finest in India. In its bold forms, and elaborately inwrought ornamentation it recalls the descriptions by Homer of the work of the artists of Sidon in bowls of antique frame. Some are simply etched, and others deeply cut in mythological designs [Plate 14], and others [Plate 15] are diapered all over with *crustæ* of the leaf pattern, seen in Assyrian sculptures, copper on brass, or silver on copper, producing an effect often of quite regal grandeur. Castellani possesses the finest specimen

known (Plate 16), of silver encrusted on brown waxy copper. In Plate 15 the bold form of the *lota* is well brought out by the disposition of the diaper pattern round the body of the vessel. Plate 17 is of a little copper *lota* elegantly encrusted with silver. Plate 18 is an illustration of Madras hammered work in copper. Nothing could be more effectual than the simple architectural decoration of this little *lota*, which is one of Colonel Michael's admirable selections. The ornamentation of the dish represented in Plate 19 is excessive, but is skilfully relieved by the fluted pattern of the cove. All these illustrations are of Tanjore work. Among the Prince of Wales' Indian presents is a collection of little brass figures from Vizagapatam, which for skilful modelling, finish, and a certain irresistible grotesqueness of expression, are the finest I have ever seen. I have been permitted to add engravings of seven of them [Plates 20 to 26], which graphically illustrate the whole gamut of military swagger in man and beast. Plate 27 is a representation of a Madura temple lamp. The temple bells of India are celebrated for the depth and purity of their note, and those of Madras are distinguished above all others by their stately architectural forms. The handles are generally crowned with a group of the Puranic gods, sculptured in full relief. The sacrificial vases also are often very beautifully designed and wrought. There is a very fine one in the India Museum [Plate 28] from some temple of Vishnu in Madras. The vase figured in Plate 29 is said to be from Nipal, and is possibly a tea-pot.

We have seen that beside ordinary brass, the Hindus use an alloy of copper mixed with gold, like the ancient *aes Corinthium*. The so-called dark "bronzes" of India, are not of true bronze, that is a mixture of copper and tin, which the Hindus hold to be impure, but of copper without alloy.

DAMASCENED WORK.

DAMASCENING is the art of encrusting one metal on another, not in *crustæ*, which are soldered on or wedged into the metal surface to which they are applied, but in the form of wire, which by undercutting and hammering is thoroughly incorporated with the metal which it is intended to ornament. Practically, damascening is limited to encrusting gold wire, and sometimes silver wire, on the surface of iron, or steel, or bronze. This system of ornamentation is peculiarly Oriental, and takes its name from Damascus, where it was carried to the highest perfection by the early goldsmiths. It is now practised with the greatest success in Persia and in Spain. In India damascening in gold is carried on chiefly in Cashmere, at Gujrat and Sialkote in the Panjab, and also in the Nizam's dominions, and is called *kufi* work. Damascening in silver is called *bidri*, from Bidar, in the Nizam's Dominion, where it is principally produced. There is a cheap *kufi* work done by simply laying gold leaf on the steel plate, on which the ornamentation has been previously etched. The gold is easily made to adhere to the etching, and is then wiped off the rest of the surface.

The spice box lent by the Queen, of which Plates 30 and 31 are illustrations, is one of the finest examples of the *kufi* work of the Panjab in the India Museum. Some beautiful examples of it will also be noted among the Museum collection of arms [Plates 40 and 42]. In *bidri* the metal ground is a compound of

copper, lead and tin, made black on the surface by dipping it in a solution of sal-ammoniac, saltpetre, salt and blue vitriol. This alloy, after being first melted and cast, is turned in a lathe to complete the form, which is usually that of the ordinary *sarai*, or water goblet, or *hukah* stand. Then the required pattern is graven over it, and inlaid with silver; and finally the ground of the vessel is blackened, and its silver ornamentation scoured to the brightest polish.

Bidri is also made at Purniah, in the Bhagalpur division of Bengal, where only zinc is mixed with copper in the alloy: and inferior kinds of the work are produced at other places. It is also imitated in pottery. It is the highest art practised in India after enamelling, and was originally introduced by the Mahomedans from Persia. In the *bidri* of Bidar the floral decoration is generally drawn in a more or less naturalistic manner [Plates 32 and 33], while in that of Purniah it is always strictly conventional [Plates 34 and 35]. Fig. 34 is an admirable example of a gold decorative effect produced by the skilful use of a few simple lines. Sometimes the decoration of the Purniah *bidri* is Chinese in character, and has evidently been derived through Sikkim or Bhutan.

ENAMELS.

ENAMELLING is the master art craft of the world, and the enamels of Jaipur in Rajputana rank before all others, and are of matchless perfection. There are three forms of enamelling followed.

In the first the enamel is simply applied to the metal as paint is applied to canvas; and in the second, translucent enamels are laid over a design which has been etched on, or hammered [*repoussé*] out of the metal. Both these are comparatively modern methods. The third form of enamelling by encrustation is very ancient, and is known under two varieties, namely, the *cloisonné*, in which the pattern is raised on the surface of the metal by means of strips of metal or wire welded on to it; and the *champlevé*, in which the pattern is cut out of the metal itself. In both varieties the pattern is filled in with the enamel. In all forms of true enamelling the coloring glaze has to be fused on to the metal. There is indeed a fourth form of enamelling, practised by the Japanese. They paint in the pattern coarsely, as in the first form, and then outline it with strips of copper or gold, to imitate true *cloisonné* enamels. The Jaipur enamelling is *champlevé*. A round plate among the Prince of Wales' Indian presents is the largest specimen of it ever produced. It took four years in the making, and is in itself a monument of the Indian enameller's art. Another notable example of it is the beautiful covered cup and saucer, and spoon, belonging to Lady Mayo. The bowl of the spoon is cut out of a solid emerald, and, as in all Hindu sacrificial spoons, from which it is designed, is in the same plane with the

handle. It is perfect in design and finish, and is surely the choicest jewelled spoon in existence. Another exquisite example of Jaipur enamelling is the little perfume box, or *atardan*, something like a patch box, with a cone-shaped cover, belonging to Mr. W. Anderson, and formerly exhibited in the South Kensington Museum. All round the box is a representation of Krishna, followed by pretty cows and the fair shepherdesses, wandering through a grove of wide-spreading trees, with birds singing among their branches: and all round the cover of Krishna dancing with the shepherdesses, on a green ground of hills and valleys, dales and fields. It was surmounted with a yellow diamond, in perfect harmony with the colors of the green, white, blue, orange, and scarlet enamels, but the owner has replaced it by a perfectly in-harmonious stone of the purest and most brilliant water. I deeply regret that it has not been possible to obtain illustrations of the Prince of Wales' plate, Mr. Anderson's box, and Lady Mayo's cup and saucer and spoon, in time for the publication of this Handbook. Of all the Prince of Wales' enamels the daintiest device is a native writing-case, or *kalamdan*, shaped like an Indian gondola [Plate 36]. The stern is figured like a peacock, the tail of which sweeps under half the length of the boat, irradiating it with blue and green enamels, brighter even than the natural iridescence of a peacock's tail. The canopy which covers the ink bottle is colored with green, blue, ruby, and coral red enamels. It is the mingled brilliance of its greens, blues, and reds, laid on pure gold, which makes the superlative excellence and beauty of the enamelling of Jaipur. Even Paris cannot paint gold with the ruby and coral reds, emerald green, and turquoise and sapphire blues of the enamels of Jaipur, Lahore, Benares, and Lucknow. In Lady Mayo's spoon the deep green enamel is as lustrous and transparent as the emerald which forms the bowl. Among the arms in the India Museum are some fine examples of old Jaipur enamelling. The handles of the yak's tails, and of the sandal-wood and ivory horse wisps, and of the peacock's tails, which, like the yak's tails,

are symbols of royalty and divinity throughout the East, are magnificent examples of the grandest of the art crafts of India, and truly regal treasures. The art is practised everywhere in India, at Lucknow and Benares, at Multan and Lahore, and in Kangra and Cashmere, but nowhere in such perfection as at Jaipur. It is probably a Turanian art. It was introduced into China, according to the Chinese, by the Yeuèchi, and was carried as early, if not earlier into India. From Assyria it probably passed into Egypt, and through the Phœnicians to Europe. Sidon was as famed for its glass, as was Tyre renowned for its purple; and the Sidonians were not only acquainted with glass-blowing, but also with the art of enamelling in glass in imitation of the precious stones. Glass was already known to the Hindus in the time of the Mahabharata, in which we read that at the *raja-surya* of Yudhis-thira, one of the royal pavilions was paved with "black crystal," which Duryodhana on entering mistook for water, and drew up his garments lest he should be wetted. Among the Prince of Wales' several specimens of the charming Cashmere enamels, in which presents are the ground, of the usual shawl pattern ornamentation cut in gold, is filled in with turquoise blue. Sometimes a dark green is intermixed with the blue, perfectly harmonised by the gold, and producing a severely artistic effect. Lady Wyatt possesses a remarkably fine goblet in this style of Cashmere enamel [Plate 37].

Among the many splendid loans contributed by the Queen to the India Museum is a *Huka* stand, the silver bowl [Plate 38], of which is painted with flowers in green and blue enamel. It is one of the finest specimens I know, of the best Mogol period of transparent enamelling.

At Pertabghar in Rajputana extremely effective and brilliant trinkets are made, apparently by melting a thick layer of green enamel on a plate of burnished gold, and, while it is still hot, covering it with thin gold cut into mythological, or hunting and other pleasure scenes; in which, amid a delicate network of

floriated scrolls, elephants, tigers, deer, peacocks, doves, and parrots are the shapes most conspicuously represented. After the enamel has hardened the gold work is etched over with a graver so as to bring out the characteristic details of the ornamentation. In some cases it would seem as if the surface of the enamel was first engraved, and then the gold rubbed into the pattern so produced, in the form of an amalgam, and fixed by fire. Plate 39 gives illustrations of a casket, and its panels, of this Pertabghar work, lent by the Queen. The enamels of Ratam in Central India are identical in general character with those of Pertabghar, but are deep blue in colour, not green.

Beautiful glass bangles [*churis*], and such like ornaments are made at Rampur [whence they are named *Rampurmaniharan*] near Mirut. These glass ornaments, of the most brilliant colours, are also made at Hushyarpur, Multan, Lahore, Patiala, Karnal, Panipat, and other places in the Panjab: at Banda in the North-Western Provinces; at Dalman and Lucknow in Oudh, where the art was introduced from Multan; and at Mangrul in the Central Provinces. In the Bombay Presidency glass-making has its headquarters at Kapadvanj in the Kaira district of Gujarat. It is made into bangles, beads, bottles, looking-glasses, and the figures of animals, chiefly peacocks, for export to Bombay and Kathiwar. Glass trinkets are also made in the Kheda district of Kandesh, and at Bagmandli in the Ratnagiri collectorate. In the Madras Presidency glass bangles are extensively made, both at Matod and Tumkur in Mysore: and in several villages between Gutti and Bellary in the Bellary collectorate. The glass phials for Ganges water, seen all over India, are made chiefly at Nagina, in the Bijnur district of the North-Western Provinces, and at Sawansa, in the Pertabghar district of Oudh. Most of the Ganges water, which myriads of pilgrims yearly convey from sacred Hardwar to all parts of India, is carried in the phials and flasks produced by the *manihars* of Nagina and Sawansa.

ARMS.

IN the Rig-Veda frequent allusion is made to the use of the bow, the mastery of which was considered so important that a supplementary Veda, the Dhanur Veda, is devoted to it. In the Ramayana, Rama wins Sita for his bride by bending the great bow of Siva; and in the Mahabharata the choice of Draupadi fell on Arjuna for his skill in archery. In the legendary life of Gautama Buddha we are also told that when his father sought out a wife for him among the daughters of the neighbouring rajas, they all refused, because, though handsome, he had not been taught any martial accomplishments. Nevertheless the young Prince Siddhartha proved his prowess against all comers at the tournament proclaimed by the Raja Suprabuddha, for his daughter's hand, and so gained the radiant Yasodhara for his wife. The Agni Purana gives a most elaborate classification of arms; and they are represented in every variety of form on the most ancient monuments of India. Indian steel has been celebrated from the earliest antiquity, and the blades of Damascus, which maintained their pre-eminence even after the blades of Toledo became celebrated, were in fact of Indian steel. Ctesias mentions two wonderful Indian blades which were presented to him by the King of Persia and his mother. The Ondanique of Marco Polo's travels refers originally, as Colonel Yule has shewn, to Indian steel, the word being a corruption of the Persian *Hundwaniy*, i.e., Indian steel. The

same word found its way into Spanish, in the shapes of *Alhinde* and *Alfinde*, first with the meaning of steel, and then of a steel mirror, and finally of the metal foil of a glass mirror. The Ondanique of Kirman, which Marco Polo mentions, was so called from its comparative excellence, and the swords of Kirman were eagerly sought after, in the fifteenth and sixteenth centuries, by the Turks, who gave great prices for them. We have seen that Arrian mentions Indian steel, *σίδηρος Ἰνδικός*, as imported into the Abyssinian ports; and Salmasius mentions that among the surviving Greek treatises was one *περὶ βαφῆς Ἰνδικοῦ σιδήρου*, "on the tempering of Indian steel."

Twenty miles east of Nirmal, and a few miles south of the Shisha hills, occurs the hornblende slate or schist from which the magnetic iron used for ages in the manufacture of Damascus steel, and by the Persians for their sword blades, is still obtained. The Dimdurti mines on the Godavari were also another source of Damascus steel, the mines here being mere holes dug through the thin granitic soil, from which the ore is detached by means of small iron crowbars. The iron ore is still further separated from its granitic or quartz matrix by washing; and the sand thus obtained is still manufactured into Damascus steel at Kona Samundram, near Dimdurti. The sand is melted with charcoal, without any flux, and is obtained at once in a perfectly tough and malleable state, superior to any English iron, or even the best Swedish. The Persian [Armenian] merchants, who in Voysey's days still frequented the iron furnaces of Kona Samundram, informed him that they had in vain attempted to imitate, in Persia, the steel formed from it. In the manufacture of the best steel three-fourths of Samundram ore is used, and one-fourth of Indore, which is a peroxide of iron.

In the Panjab, superbly ornamented arms, of the costliest description, are made at Lahore, Sialkote, Gujrat, Shahpur, and in Cashmere. Good arms are also made at Monghyr, in the Bhagalpur division of Bengal. In Chittagong the *dao* or bill,

manufactured by the Mugs, has a long blade, widening towards the top, which is square, and fitted straight in the handle. The *kukri* of the Ghurkas of Nipal, which has a short handle and an incurved blade, widening in the middle and drawing to a point at the end, is well known. Swords of good temper are still made at Pehani, in the Hardoi district of Oudh.

Excellent steel is fused for gun-barrels and sword-blades along the banks of the Nerbudda, at Panagar, Katangi, Jabera, Barela, and Tenderkhera in the Central Provinces; at Dewulghat in the Berars; and in Mysore. The knives and hatchets made by the Ghasias along the Upper Godavari have been already mentioned.

Nagpur, the capital of the Central Provinces, is noted for the manufacture of steel weapons, such as spears and daggers, with the steel brought from the valleys of the Nerbudda and Tapti. In the Madras Presidency arms and cutlery are produced at Tumkur for sale all over Mysore. There are 120 forges at Tumkur. Good swords, and spears, and daggers are also made at Kudwur and Vizianagram; the superbly-mounted arms of the latter place being used chiefly in pageantry. In Kurg a handsomely mounted sword, of a peculiar shape, is made, called *adya-kathi*.

Handsomely-painted leather shields are made at Ahmedabad and in other parts of Gujarat in the Bombay Presidency, and also in Rajputana; and the Katch silversmiths are famous all over India for their decoration of arms of all sorts in *repoussé* gold and silver.

For variety, extent, and gorgeousness, and ethnological and artistic value, no such collection of Indian arms exists in this country as that belonging to the Prince of Wales. It represents the armourer's art in every province of India, from the rude spear of the savage Nicobar islanders to the costly damascened, sculptured, and jewelled swords and shields, spears, daggers and matchlocks of Cashmere, Katch, and Vizianagram. The most striking object in the collection is a suit of armour made

entirely of the horny scales of the Indian armadillo, or pangolin, [*Manis pentadactyla*], encrusted with gold, and turquoises, and garnets. There is another splendid suit of Cashmere chain armour, fine almost as lace work. The style is essentially Persian and Circassian, and is identical with that of the armour worn in Europe in the thirteenth century. The damascened casque is surmounted with a plume of pearls. There are many other suits of armour, with damascened breastplates, gauntlets, and greaves, which carry one back to the crusades and legendary history of modern Persia. Some of the sword blades are marvelously watered, several are sculptured in half relief with hunting scenes, and others are strangely shaped, toothed like a saw, and flaming [*flamboyant*]; although for mingled cruelty and grotesqueness of appearance none equal the battle-axes of the Sowrahs and Khonds. There is the *kukri* of the Ghurkas, the *adyakathi* of the Moplas, the *tiga* of the wild tribes of Central India, and the knife used in the Meriah sacrifice. The collection also contains the great sword of Mahmud Chand Sultan Shah of the date of 1707, and the sword [No. 1,439] of the famous Polygar Katabomma Naik, who defeated the English early in the present century; and, most interesting of all, the sword [No. 74] of Sivaji, the founder of the Maratha dominion in India.

The rise of the Maratha power was almost contemporary with our own appearance in India. The Mogol Emperors of Delhi were in the habit of taking the Hindu Princes and Chiefs into high employ, and among the Maratha families in their service were the Bhonslas, whose tutelary deity was the goddess Bhavani of Tuljapur. It was of their family that the renowned Sivaji was born, at Siwnir, near Junir, about twenty miles southwest of Poona, in the very heart of the *marwuls* or valleys, which lie on the landward side of the Western Ghâts between Poona and Sattara. The hilly land between the Western Ghâts and the sea is called the Konkan. This is the cradle of the Maratha race, and it was with the aid of the hardy *marwulis*, or people of

these inland and seaward valleys of the Western Ghâts, that Sivaji laid the foundation of the Maratha Confederacy, which at one time extended its sway over the whole Dakhan. The Maratha country indeed in its widest sense almost corresponds with the area of the Chalukyan style of temple architecture in India, as defined by Mr. Fergusson. It is the whole country between the Malabar and Coromandel coasts watered by the Nerbudda, Tapti, Godavari, Bhima, and Kistna. North of the Nerbudda lies Mr. Fergusson's area of Indo-Aryan architecture, and south of the Kistna the Dravidian. There is really no authentic ancient history of Southern India, but to the Hindus Sivaji was not so much the destroyer of the hated Mahomedan supremacy in the Dakhan as the restorer of the half mythical Hindu state of Salivahana, and hence the great power of his name all over India, which can be understood only by those who have some knowledge of the notions universally received by Hindus of their traditional history. As the British power grew in India, it was at last brought face to face with the Maratha Confederacy, against which, between 1774 and 1818, we had to wage four harassing wars, signalised by the great victories of Assai and Kirki. In the latter battle the dominion of the Marathas was finally overthrown, although it was not until 1819 that their last fortress was taken. Their forts among the spurs of the Western Ghâts were their strength, and every one of them has its legend, keeping alive the spirit of nationality and patriotism among these hardy and romantic *marwatis*. Sivaji [nicknamed by Aurungzebe "a mountain rat"], at the age of nineteen, seized Tornia, and with the spoils built Raighur, where he was subsequently enthroned, and where he died. After building Raighur, he took Singar and Purandar, and it was from the Konkan hill fort of Pertabghar, opposite Mahabaleshwur, that he issued, after receiving his mother's blessing and offering his vows to Bhavani, to circumvent, by an act of the most detestable treachery, the assassination of the Bijapur General, Afzul Khan. He enticed his generous and too confiding enemy into a secret

turning in the road leading down the hill side, and there, in pretending to embrace him, ripped his bowels open with the *wagnak* ["tiger claw"] concealed in his left hand, and stabbed him to the heart with the *bichwa* ["scorpion" dagger] hid up his right sleeve. He is the great national hero of the Maratha Hindus, and his descendants are held in the highest reverence throughout the Dakhan.

Every relic of his, his sword, daggers, and seal, and the *wagnak* or "tiger-claw" with which he foully assassinated Afzul Khan, have all been religiously preserved at Sattara and Kolhapur ever since his death in 1680. Mr. Grant Duff, in his *Notes of an Indian Journey*, has described the worship of his famous sword, Bhavani, at Sattara. The sword in the Prince's collection is not this deified weapon, but the one that has always been kept, since Sivaji's death in 1680, at Kolhapur. The political value of the gift is simply incalculable. It was a family and national heirloom, which nothing but a sentiment of the profoundest loyalty could have moved the descendants of Sivaji to give up, and which has been sacredly guarded for the last 200 years at Kolhapur, as the palladium of their house and race, by the junior branch of the Bhonsla family.

Only less significant are the other gifts of the great sword of Sultan Chand, and the sword of Katabomm Naik. All these historical weapons, the symbols of the latent hopes and aspirations of nations and once sovereign families, were literally forced on the Prince's acceptance in a spontaneous transport of loyalty, and their surrender may be fairly interpreted to mean that the people and princes of India are beginning to give up their vain regrets for the past, and, sensible of the present blessings of a civilised rule, desire to centre their hopes of the future in the good faith, and wisdom, and power of the British Government.

The barrel of one of the Prince's matchlocks [Plate 40], damascened in gold, with a sort of poppy pattern, one flower nodding above another along the whole length of the barrel, is the noblest example of damascening in the whole collection.

There is another matchlock [Plate 41], the stock of which is carved in ivory, against a chocolate-stained background, with scenes of wild animal life, in which every group is a perfect cameo. The richer arms are resplendent with gold and enamelling, and gems, and are generally of uncontaminated Indian design. There is, indeed, but little room for the obtrusion of European design in Oriental arms.

There are, however, several swords and daggers in the Prince's magnificent collection of arms, which have been mounted in native design by English workmen, and the result is not less mischievous than when European designs are literally imitated by unsophisticated native handicraftsmen. The mechanical character of European manufactures requires a consistent general finish which is quite out of place in the bold and freehand compositions of the best native art work, in which finish is strictly subordinated to practical use and artistic effect; and, if a taste for mechanical perfection becomes prevalent with the spread of middle class English ideas among the princes and chiefs of India, Indian wrought arms and jewelry will soon become arts of the past. The splendour of Indian arms and jewelry is due to the lavish use of diamonds, rubies, emeralds, and other bright and colored stones. But, as their work is really manual, and grows up spontaneously, like a growing flower, under their hands, the native jewellers are able to use the most worthless gems on it, mere chips and scales of diamonds, often so thin that they will float on water, and flawed rubies and emeralds, which have no value as precious stones, but only as barbaric blobs of colour. The European jeweller can use with his machine-made work only the most costly gems, polished to the highest lustre, far too costly to be used except for their own effect and intrinsic value only, and it would be impossible to employ them merely to enhance the general decorative effect, as in India. There are examples in the Prince's collection of elaborate gold work in purely native design, but by English workmen; and the mechanical precision of their work has forced

them to use rose diamonds and brilliants in the ornamentation, but necessarily so scantily that all effect of splendour is lost. Where in other examples worthless Indian stones have been set in machine-made English gold work, the effect is flat and mean beyond belief. If, therefore, Indian jewelry should become mechanical, and hard, and glittery in character, it will at once cease to be artistic, and sink to the level of the extravagantly priced vulgar trinketry of Birmingham, Paris, and Vienna.

The battle-axes used by the wild tribes are identical in form with those found among the prehistoric remains of man in Europe, perhaps because they have all been instinctively modelled from the teeth of carnivorous animals. It is impossible also to overlook the strong resemblance of the forms of Persian and Arabian arms, and of Indian arms shewing Persian and Arabian influence, to those represented on the sculptures of Assyria and Babylonia, and in the hieroglyphic painting of Egypt, as figured in Rawlinson's *Ancient Monarchies* and Wilkinson's *Ancient Egyptians*. This is especially marked in the typical fiddle-shaped handles of the daggers. The Arabian arms are distinguished by their fine filigrain work and the absence of gems, the Persian by their superb damascening, enamelling, and carving, and the rare employment of gems in their decoration, only turquoises and pearls being generally used, except in the incrustation of jade mountings; while the Indian arms are characterised by the high relief of their elaborately hammered and cut gold work, and the unsparing use of the precious gems with which they are all over embellished. It is the special defect of Indian, particularly of Brahmanical art, to run into this excess and satiety of decorative details. It is the exclusive prerogative of Greek art to produce beauty without the use of ornament.

The interest of the India Museum also culminates in its collection of arms, which have been arranged with the most imposing effect, according to the plan adopted by the Hon. Willbraham Egerton, M.P., in the *Handbook of Indian Arms* which

he has prepared for the India Office, and which will be ready for sale at the India Museum on its reopening. It is in fact a classified and descriptive catalogue of the arms exhibited at the old India Museum, and is the only completed catalogue of any section of the Museum that has yet been made; and it will always remain a work of permanent reference on Indian armoury. Mr. Egerton first gives a sketch of the military history of India from the earliest times, adding figures of the arms of ancient India represented on the Buddhist sculptures of Sanchi [B.C. 250], and Udyagiri, and references to those portrayed in the Buddhist paintings at Ajanta [about A.D. 400]; and on the later Hindu temple of Bhurvaneswar [A.D. 650]; in the Jaina sculptures at Saitron in Rajputana [A.D. 1100]; on the sun temple at Kanarak [A.D. 1237]; and in the sculptures of the fifteenth century in the neighbourhood of Mandore, the former capital of Marwar. After this follows a most interesting and valuable chapter on the decoration, and processes of manufacture of Indian arms, which really exhausts the subject. Mr. Egerton considers that Aryan art predominates over Turanian in Indian arms, and he divides the former into Hindi or Indian, and Iranic or Persian, and the latter into Dravidian, Tibetan, and Indo-Chinese. There is an obvious difference in the forms and details of decoration prevailing in the Panjab, Rajputana, and Hindustan generally, and of those which prevail in the Dakhan, and again along the Eastern Himalayas; but the distinguishing expression of an ethnic or national art is given to it not by its forms but by its animating spirit; and whatever may be the local shapes it takes there prevails all through India proper a distinctive art, which we recognise to be in its essence unvarying and indivisible, and which we may call Indian. A Mahommedan mosque in India, although its form may be Saracenic, is generally as essentially Hindu in expression as a temple of Siva or Vishnu. On the other hand, there is a deep and impassable gulf fixed between Indian art and the as strongly specialised art of Further India.

In classifying the India Museum arms Mr. Egerton has divided them in a thoroughly practical manner into twelve groups, which are partly ethnical, partly geographical, and partly economical.

GROUP 1 is of the arms of the aboriginal and non-Aryan tribes of Central India, and the Andaman Islands.

GROUPS 2 and 3, of the aboriginal and Dravidian races of Southern India.

GROUP 4, of the hill tribes of Assam and the North East frontier.

GROUP 5, of British and native Burma and Assam.

GROUP 6, of the Malayan Peninsula, and Indian Archipelago.

GROUP 7, of Nipal.

GROUP 8, of the Rajputs.

GROUP 9, of the Marathas; and of the Mahommedans of Mysore and the Dakhan.

GROUP 10, of Sindh and the Panjab.

GROUP 11, of the Afghans and Persians; and also of the Abyssinians, &c.

GROUP 12, of arms used for athletic and sacrificial purposes.

It is in this order that the arms have been arranged in the India Museum, and nothing could be simpler or more effective for the purpose of instruction, or more suitable for their artistic display. In his preface Mr. Egerton expresses a regret, in which every one will concur, that the collection of Indian arms at the Tower has not been united to the India Museum collection: and that the Government of Madras should have recently allowed the old historical weapons from the armouries of Tanjore and Madras to be broken up and sold for old metal. This act of vandalism is all the more to be deplored, as neither the Tower nor the India Museum collections are, as Mr. Egerton points out, rich in Southern Indian arms.

I have illustrated a spear-head [Plate 43] of Vizianagram work, as an example of decoration derived from the temple architecture of the Madras Presidency.

TRAPPINGS AND CAPARISONS.

ALL Indian collections are overloaded with gaudy trappings, state caparisons and housings, horse-cloths, elephant-cloths, howdahs, high umbrellas, standards, peacock tails, yak tails, and other ensigns of royalty. But they look very brave in procession through the narrow, picturesque streets, thronged with the gay crowd of an Indian town, advancing tumultuously between the high, overhanging houses, which are painted storey above storey in red and green and yellow, like macaws; or when the Maratha princes and their whole court go forth in unprepared pomp, with trumpets, shawms, high shrilling pipes, and belaboured *tom-toms*, into the jungle to do homage at the *dasera* festival to the *palas* tree [*Butea frondosa*]; returning every one with his hands full of its yellow flowers to offer as gold before the idols in the wayside village temples. They are also very interesting for the designs to be found on the metal work; and for the manner in which cut cloth work, *opus consutum*, or *appliqué* as it is termed by the French, is used in their ornamentation, particularly of the horse-cloths, saddles, and girths.

Chatries or umbrellas, and *chauries* or horse-whisks of sandalwood, ivory, and particularly yak tails, and *murchals* or fly-flappers of peacock feathers, are regarded as the most solemn symbols of state throughout the East. In the *Ayin Akbari*, or *Institutes of the Emperor Akbar*, written by Abdul Fazl, Akbar's great minister [see Gladwin's Translation, London, 1800], the following enumeration is given

of the ensigns of state "which wise monarchs consider as marks of divine favour."

The *aurung* or throne, the *chuttur* or umbrella, the *sayiban* or sun fan; and the *kowkebah* or stars in gold and other metals which are hung up in front of palaces: and these four ensigns are used only by kings.

The *alum*, the *chuttertowk*, and the *tementowk*, all varieties of standards of the highest dignity, appropriated solely to the king and his military officers of the highest rank.

Then follow the *kowrek*h or *demameh*, the *nekareh*, and the *dehl*, three kinds of drums; the *kerna* of gold, silver, brass, or other metal, the *serna*, the *nefeer*, the *sing*, or horn of brass, made in the form of a cow's horn, all different kinds of trumpets and the *sing*, or conch shell.

Formerly, adds Abdul Fazl, they used to blow the conch shell four hours before night, and the same time from daybreak; but now the first blast is at midnight and the other at sunrise:—"And one hour before sunrise the lively blast of the *serna* awakens those who slumber; and the *kowrek*h is beat a little. These are presently joined by the *kerna*, the *nefeer*, and all the other musical instruments excepting the *nekareh*. Then after a short pause, the *serna* and the *nefeer* play the musical modes, after which the *nekareh* is beat, and the people with one voice pray blessings on his majesty." Thus was the *reveillé* sounded in every camp and garrison of Hindustan and the Dakhan during the plenitude of the Mogol power in India, in the reign of the Emperor Akbar, 1556—1605; at the very moment when Queen Elizabeth was signing [31 December 1600] the charter of the East India Company, which was to prove its death warrant.

In Herklot's *Quanoon-i-Islam*, [*Canons of Islam*], London, 1832, the *alums* used in the Moharram procession in India are described in detail. They are analogous to the standards used by the Greeks and Romans, and those figured on the

gates [*torans*] of the Sanchi tope; consisting not only of flags, but of all sorts of devices in metal, raised on the top of long staves. They are generally kept wrapped up in bags of scarlet cloth, and displayed only on days of festivity and parade; and, of old time, before the British peace was established, in battle. The umbrella is the highest of all these insignia of regality. *Chatrapati*, "lord of the umbrella," is even now a prouder title in India than *raja* or *maharaja*. The king of Burma's title translated is "Lord of the Twenty-four Umbrellas;" and the Emperor of China always has that number of umbrellas borne before him, even in the hunting-field. A vermilion umbrella everywhere in the east signifies imperial authority. The *Mahabharata* makes frequent mention of umbrellas as a mark of royalty, and speaks of the gift of a white umbrella, having a hundred ribs, as calculated to insure the giver a place in Indra's heaven. Rajendralala Mitra, in his *Antiquities of Orissa*, Calcutta, 1875, says that the most detailed rules are given in the *Yukti kalapataru* for the making and proportion of the parts of both royal and common umbrellas. An umbrella with the stick of choice wood, and ribs of selected bamboo, and a cover of scarlet cloth, is a gift worthy of presentation to a king. It is called a *prasada*. An umbrella with blue cloth and a gold fringe is meet for a prince. It is called a *pratapa*. An umbrella, the frame and stem of which are of sandal-wood, mounted in gold, with a golden *kalasa* or knop on the top, and covered with pure white, fringed with gold, is the right umbrella for a noble. It is called a *kanaka-danda*. But the most important umbrella of all is the *nava-danda*, which is used only on occasions of high state, such as coronations, the marriages of kings and princes, and other regal celebrations. The stem, the sliding frame and the ribs are all of pure gold. The handle is a pure ruby, and the knop at the end a diamond, and the cover of silk, of the choicest colours, and fringed with thirty-two looped strings of pearls, with thirty-two pearls on each string. Umbrellas

are also appropriately decorated with the feathers of the peacock, heron, parrot and goose.

The *chamara* or *chauri* is next in dignity to the umbrella, and may be made either of strips of sandal-wood, or of ivory; but the most esteemed are those made of the tail of the Himalayan yak. The Prince has a pair of yak-tail *chauris*, and also of *murchals*, mounted on elaborately jewelled and enamelled handles. To put gems and enamel on peacock feathers would seem like adding another hue to the rainbow, but there is no "wasteful and ridiculous excess" in the masterly way in which the Jaipur artist has used the feathers and gems, and his secret enamels, to mutually enhance each other's effect. Nothing can be richer than his materials, nothing more harmonious and effective than the manner in which he has combined them. The popes always have peacock feathers borne before them at their enthronement, and no doubt the custom was derived at some distant date from the East. There is a *sayiban* in the arms room of the India Museum made of a talipot palm leaf, with a conventional tree pattern worked on it, which in form and detail is exactly like the fan-like ensign represented in the Nineveh marbles as borne before the kings of ancient Assyria. The royal *howdahs* and the painted open palanquin in the arms room are most picturesque-looking objects, and are valuable examples of strong and massive goldsmith's work, and Indian ivory and wood carving and turning.

JEWELRY.

EVEN a greater variety of style is seen in Indian jewelry than in Indian arms. Mr. W. G. S. V. FitzGerald sent to the Annual International Exhibition of 1872, a collection of the grass ornaments worn by the wild *Thakurs* and *Katharis* of Matheran, and the Western Ghats of Bombay, which had been made by Dr. T. Y. Smith, the accomplished Superintendent of that Hill Station; and by the side of these grass collars, necklaces, bracelets, anklets, and girdles, were exhibited also examples of the gold jewelry of thick gold wire, twisted into the girdles, bracelets, anklets, necklaces, and collars, worn all over India, and which are fashioned in gold exactly as the Matheran ornaments are fashioned in grass. These gold collars are identical with the "*torque*" [from Latin *torquis*, a twisted neck-chain], worn by the Gauls, which gave its name to the patrician Roman family of Torquatus, from Manlius having, about B.C. 361, earned immortal glory by slaying a gigantic Gaul, whose dead body he stripped of the torque, which he placed round his own neck. The Gaul, in the Roman statue of "the Dying Gladiator," is represented with a torque round his neck. Necklaces of gold are also worn in Western India which are identical in character with the Matheran necklaces of chipped and knotted grass, which indicate the origin also of the peculiar Burmese necklaces, formed of tubular beads of ruddy gold strung together, and pendent from a chain which goes round the neck, from which

the strings of tubular beads of gold hang down in front, like a golden veil. The details in these Burmese necklaces are often variously modified, the gold being wrought into flowers, or replaced by strings of pearl and gems, until all trace of their suggested origin is lost. By the side of Mr. FitzGerald's collection, I exhibited the "fig-leaf" worn by the women in the wilder parts of India, and which in many places is their only clothing. First was shewn the actual "fig-leaf," the leaf of the sacred fig, or *pipal*, *Ficus religiosa*; next a literal transcript of it in silver, and then the more or less conventionalised forms of it, but all keeping the heart-shape of the leaf; the surface ornamentation in these conventionalised silver leaves being generally a representation of the *pipal* tree itself, or some other tree, or tree-like form, suggesting the "Tree of Life" of the Hindu Paradise on Mount Meru. These silver leaves are suspended from the waist, sometimes, like the actual leaf, by a simple thread, but generally by a girdle of twisted silver with a serpent's head where it fastens in front; and this ornament is possibly the origin of the "heart and serpent" bracelets of European jewelry. In Algeria, a leaf-shaped silver ornament is worn by girls till they come to an age when more voluminous apparel is required; and it is the emblem of virginity throughout the Barbary [Berber] coast. The forms of the *champaca* [*Michelia Champaca*] bud, and of the flowers of the *babul* [*Acacia arabica*] and *seventi* [*Chrysanthemum* species], the name of which is familiar in England through the story of "Brave Seventi Bhai," "the Daisy Lady," in Miss Frere's *Old Deccan Days*, are commonly used by Indian jewellers for necklaces and hairpins, as well as of the fruit of the *anola* or *aonla* [*Phyllanthus emblica*], and *ambgul* [*Elæagnus Koluga*], and mango, or *amb* [*Mangifera indica*]. The bell-shaped earring, with smaller bells hanging within it, is derived from the flower of the sacred lotus; and the cone-shaped earrings of Cashmere, in ruddy gold, represent the lotus flower-bed. The use

of these flowers in Indian jewelry is possibly not prehistoric, but has come down from an immemorial tradition. The lotus, which often passes into the *seventi*, is seen everywhere in Indian and Chinese and Japanese decoration, and on Assyrian and Babylonian sculptures.

As primitive probably as the twisted gold wire forms of Indian jewelry, is the chopped gold form of jewelry worn also throughout India, the art of which is carried to the highest perfection at Ahmedabad and Surat in Western India. It is indeed worn chiefly by the people of Gujarat. It is made of chopped pieces, like jujubes, of the purest gold, flat, or in cubes, and, by removal of the angles, octahedrons, strung on red silk. It is the finest archaic jewelry in India. The nail-head earrings are identical with those represented on Assyrian sculptures. It is generally in solid gold, for people in India hoard their money in the shape of jewelry; but it is also made hollow to perfection at Surat, the flat pieces, and cubes, and octahedrons being filled with *lac* or *dammar*.

The beaten silver jewelry of the Gonds, and other wild tribes of the plains of India, and valleys of the inner Himalayas, is also very primitive in character. The singular brooch worn by the women of Ladak [*v. Miss Gordon Cumming's From the Hebrides to the Himalayas*, 1876, p. 219], is identical with one found among Celtic remains in Ireland and elsewhere. It is formed of a flat and hammered silver band, hooped in the centre, with the ends curled inward on the hoop; and this is too artificial a shape to have arisen independently in India and Europe, and must have travelled westward with the Celtic emigration from the East. Its form is evidently derived from the symbols of serpent and phallic worship.

The waist-belt of gold or silver, or precious stones, which is worn in India to gird up the *dhoti*, or cloth worn about the legs, recalls the Roman *cingulum*; and, as in Rome, when the ceremony of changing the *toga prætexta* for the *toga virilis* was

performed, the *aurea bulla* was taken from the boy's neck, and consecrated to the domestic Lar ; so, in India, at the ceremony of investiture with the sacrificial thread, an identical ornament, a hollow hemisphere of gold, hung from a yellow cotton thread or chain of gold, is taken from the boy's neck, and the sacred cord, the symbol of his manhood, is put on him.

The *nava-ratna* or *nao-ratan*, an amulet or talisman composed of "nine gems," generally the—

Coral, Topaz, Sapphire,
Ruby, flat Diamond, cut Diamond,
Emerald, Hyacinth, and Carbuncle,

is certainly suggestive also of some connexion with the *Urim* and *Thummim*, or sacred oracle of the Jews, taken by Chosroes II from Jerusalem, A.D. 615, and probably still existing among the ruins of one of the old Sassanian palaces of Persia. This ancient ornament gave its name as a collective epithet to the "nine-gems" or sages of the Court of Vikramaditya, B.C. 56. In books the nine gems of the amulet are said to be pearl, ruby, topaz, diamond, emerald, lapis-lazuli, coral-sapphire, and a stone, not identified, called *gomedā*. The *tri-ratna*, is the "triple-gemmed" "Alpha and Omega" jewel of the Buddhists, symbolical of Buddha, the Law, and the Church.

The jeweller's and goldsmith's art in India is indeed of the highest antiquity, and the forms of Indian jewelry as well as of gold and silver plate, and the chasings and embossments decorating them, have come down in an unbroken tradition from the Ramayana and Mahabharata. The first light of Aryan civilisation dawned in the Ganges valley, and spread thence into the valley of the Tigris and the Euphrates. The civilisation of Egypt was more ancient, but was undoubtedly largely influenced by Assyria and India, influencing them in turn ; and from the earliest ages, as throughout all ages, through the Arabs,

Phoenicians, and Armenians, the civilisations of India, Egypt, Assyria, and of Greece and Rome, have acted and reacted on each other. But the earliest records, the national epics, and ancient sculptures and paintings, represent the Hindu forms of Indian jewelry, and gold and silver plate, and common pottery and musical instruments, and describe them, exactly as we have them now.

Jewelry is constantly mentioned in the Rig-Veda. The Maruts decorate their persons with "various ornaments," "they are richly decorated with ornaments," and "shining necklaces are pendent on their breasts." The Aswins are adorned with "golden ornaments," and the Asuras likewise have "plenty of gold and jewels." The sage Kakshivat, the reputed author of several of the hymns of the Rig-Veda, prays for a son "decorated with golden earrings, and a jewelled necklace," and largesses of "gold and jewels," to the priests and Brahmans are constantly mentioned. In the Nirukta, or Etymological Glossary, forming one of the Vedangas, and in the grammar of Panini, who is supposed to have lived in the fourth century B.C. the names of various kinds of jewels are given, which are identical with those still in parlance throughout India. Manu minutely defines the nature and duties of the jeweller, and the fines he is to pay for piercing precious gems, such as rubies and diamonds, and for boring inferior gems improperly, and the punishment due to him for debasing gold. The references to jewelry in the Ramayana and Mahabharata are too numerous for quotation. Sita is represented as arrayed for her marriage with Rama in a light *sari*-like garment of a rosy red colour embroidered with gold, and with jewelled butterflies and other bright ornaments in her raven black hair. Her ears are resplendent with gems, she has bracelets and armlets on her arms and wrists, a golden zone binds her slender waist, and golden anklets her ankles. She has jewelled rings on her fingers, and golden bells on her toes, that tinkle as she walks with naked feet over the

carpeted floor. In the Mahabharata, at the gambling match at Hastinapura, Yudhisthira is described as losing first "a very beautiful pearl; next a bag containing a thousand pieces of gold; next a piece of gold so pure that it was soft as wax; next a chariot set with jewels, and hung all round with golden bells; next 1,000 war elephants with golden howdahs set with diamonds; next 100,000 slaves all dressed in good garments; next 100,000 beautiful slave girls, adorned from head to foot with golden ornaments; next all the remainder of his goods; next all his cattle; and then his whole kingdom, excepting only the lands he had granted to the Brahmans." Sudraka, the royal author of the Hindu drama of "The Toy Cart," and who lived in the first century B.C. or A.D., describes the jeweller's *atelier* attached to the house of a courtesan:—"Where skilful artists were examining pearls, topazes, emeralds, sapphires, lapis-lazuli, coral and other jewels. Some set rubies in gold, some string gold beads in colored thread" [exactly as is done now], "some string pearls, some grind lapis lazuli, some cut shells, and some turn and pierce coral."

The old vocabulary of Amara Sinha, one of the "nine gems" of the Court of Vicramaditya, B.C. 56—A.D., quoted by Rajendralala Mitra, gives a long list of names for crowns, crests, and tiaras for the head; of rings, flowers, and bosses for the ears; of necklaces of from one to one hundred rows of gems; of all shapes and patterns of armlets and bracelets; of zones and girdles for the waists of men and women; of anklets, and other ornaments for the legs; and of rings for the fingers, and bells for the toes; and all the names it gives are still the current names of Hindu jewelry in India. The sculptures of Sanchi and Bharhut, and Amravati, and the Ajanta cave paintings, and the sculptures of Orissa [Bhuvaneswar] prove that in its forms also Hindu jewelry has remained unaltered during at least the last two thousand years. The ornaments of Sanchi and Bharhut are of the same archaic character as those still made in Central India and the

Central Provinces, and by the aboriginal tribes of the Bengal and Bombay Presidencies; while those of Amravati shew more of the elaboration and finish of the Dravidian [*"swami"*] jewelry of the Madras Presidency.

After the archaic jewelry of Ahmedabad, the best Indian jewelry, of the purest Hindu style, is the beaten gold of Sawuntwadi, Mysore, Vizianagram, and Vizagapatam, which well illustrates the admirable way in which the native workers in gold and silver elaborate an extensive surface of ornament out of apparently a wholly inadequate quantity of metal, beating it almost to the thinness of tissue paper, without at all weakening its effect of solidity. By their consummate skill and thorough knowledge and appreciation of the conventional decoration of surface, they contrive to give to the least possible weight of metal, and to gems, commercially absolutely valueless, the highest possible artistic value, never, even in their excessive elaboration of detail, violating the fundamental principles of ornamental design, nor failing to please, even though it be by an effect of barbaric richness and superfluity. This character of Indian jewelry is in remarkable contrast with modern European jewelry, in which the object of the jeweller seems to be to bestow the least amount of work on the greatest amount of metal. Weight is in fact the predominant character of European "high class" jewelry, and gold and silversmith's work. Even in reproducing the best Adams' designs, they spoil their work by making it too thick and heavy; and so demoralising is the rage for weight that English purchasers, attracted by the eye to Indian jewelry, directly they find how light it is in the hand, reject it as rubbish; the cost of Indian jewelry being from one-twentieth to one-fourth in excess of its net weight. The jury on jewelry at the Great Exhibition of 1851 actually wrote of Indian jewelry: "It is sufficient to cast a glance on the exhibitions of India, Turkey, Egypt, Tunis, to be convinced that these nations have remained stationary

from a very early period of manufacture. Some of them indeed develop ideas full of grace and originality, but their productions are always immature and imperfect, and the skill of the workman is called in to make amends for the inadequateness of the manufacturing process." Surely it is better to remain stationary than to fall, as we have in England, from the thin beaten silver of Queen Anne's reign, and the designs of Adams, to the present unseemly dead-weight silver and gold manufactures of Birmingham and London, for which customers have to pay four times more than the value of their weight. Its false appearance of richness and solidity, and flaunting gorgeousness, is in fact one of the charms of Indian jewelry, especially in an admiring but poor purchaser's eyes. You see a necklace, or whatever ornament it may be, made up apparently of solid, rough cut cubes of gold, but it is as light as pith. Yet, though hollow, it is not false. It is of the purest gold, "soft as wax," and it is this which gives to the flimsiest and cheapest Indian jewelry its wonderful look of reality. Again, you see a necklace or girdle of gems which you would say was priceless, but it is all mere glamour of pearls and diamonds, emeralds and enamel, which "deceitful shine" but have no intrinsic value. As was noticed under the head of "Arms," the Indian jeweller thinks only of producing the sumptuous, imposing effect of a dazzling variety of rich and brilliant colours, and nothing of the purity of his gems. He must have quantity, and cares nothing for commercial quality, and the flawed "tallow drop" emeralds, and foul spinel rubies, large as walnuts, and mere splinters and scales of diamonds, which he so lavishly uses, are often valueless, except as points, and sparkles, and splashes of effulgent coloring: but nothing can exceed the skill, artistic feeling, and effectiveness with which gems are used in India both in jewelry proper, and in the jewelled decoration of arms, and plate. In nothing indeed do the people of India display their naturally gorgeous and costly taste so

much as in their jewelry and jewelled arms, which are not only fabricated of the richest and rarest materials, but wrought likewise with all the elaborateness, delicacy, and splendour of design within the reach of art. Megasthenes was struck by the contrast of their love of sumptuous ornament, to the general simplicity of their lives.

The finest gemmed and enamelled jewelry in India is that of Cashmere and the Panjab, the Aryan type of which extends across Rajputana to Delhi and Central India, and in a debased meretricious form throughout Bengal. It consists of tires, aigrettes, and other ornaments for the head, and for hanging over the forehead; earrings and ear-chains, and studs of the *seventi* flower; nose-rings and nose-studs; necklaces, made up, some [Plate 44] of chains of pearls and gems, falling on the breast almost like a stomacher of gems, and others [Plate 45] of tablets of gold set with precious stones, strung together by short strings of mixed pearls and turquoises, with a large pendant hanging from the middle, gemmed in front, and exquisitely enamelled, like all the rest of this necklace, or rather collar, at the back; and armlets, bracelets, rings, and anklets; all in never ending variations of form, and of the richest and loveliest effects in pearl, turquoise, enamel, ruby, diamond, sapphire, topaz, and emerald. The bracelets often end in the head of some wild beast, like the bracelets of the Assyrian sculptures; and the plaques are sometimes enamelled at the back with birds or beasts *affronté* on either side of the taper "cypress" tree, or else some wide-spreading tree, identical, probably, with the *Asherah* or "*Hom*," the symbol of *Asshur*, connected with the worship of Astoreth or Astarte, and translated in the Bible by the word "grove," or "groves." The long dangling necklaces worn by the women are called *lalanti*, i.e. "danglers," or "dalliers," and *mohanmala*, i.e. "garlands or spells of enchantment."

The jewelry of Cashmere is identical with that of the rest of the Panjab in form, but what I have seen of it has been in

gold, and the choicest specimens in "ruddy gold," combining a good deal of gold filigrain work. The enumeration in Isaiah iii 17-24, of the articles of the *mundus muliebris* of the daughters of Zion, reads like an inventory of this exceedingly classical looking jewelry of Cashmere. Homer's lines, *Il.* xxii 468-70 [describing the grief of Andromache], are, in Pope's translation :—

" Her hair's fair ornaments, the braids that bound [δέσματα στυγνὰ],
The net [κεκρύφαλον] that held them, and the wreaths [ἄμπυκα] that crowned,
The veil (κρήδεμνον) and diadem (πλεκτὴν ἀναδέσμη) threw far away.
(The gift of Venus on her bridal day.)"

The ἀναδέσμη of Homer, supposed by Schliemann to have resembled one of the gold ornaments found by him at Hissarlik, is almost identical with the ornament of gold pendants, often gemmed, worn across the brow by the women of Cashmere and the Panjab, and indeed all over India, and in Egypt. Those who cannot afford the ἀναδέσμη πλεκτή often ornament the front part of the "head band" with imitations of it in spangles and paint. The κεκρύφαλον was the "net" and the κρήδεμνον the "veil" of Pope's translation, but the ἄμπυξ, which he translates by "wreath," and is generally translated by "head band," I have always ventured to suppose was a head ornament similar to the hemispherical golden ornament worn by women, both at Bombay and Cairo, on the top of their heads, of which one sees in collections such fine specimens from Sawantwadi and Vizianagram. The dancing girls ["Bayaderes"] of the Dakhan, wear an ornament for the bosom, resembling the Ægis of Athene, a sort of rich stomacher, with two hemispherical caps of gold to cover the breasts.

The gemmed jewelry of Delhi has lost its native vigour under European influences, but although weak it is pretty. The little miniatures, "Delhi paintings," with which some of it is adorned shew that the "limners" of the Mogol's capital have lost nothing of their cunning since Roe and Terry so highly praised their skill. They paint not with the brush, but with a pen. The *babul* ornament is not only very pretty, but highly interesting,

for it proves that the Phœnician art, so long forgotten in Europe, of soldering gold in grains, which Castellani discovered some years ago to be still practised in an obscure Italian village, has never been lost in India.

The jewelry of Sindh and Baluchistan is similar to that of the Panjab, but is usually found only in its more primitive gold and silver forms [Plates 46 and 47]. Solid silver torques, and anklets, and bracelets are very common, of a severe style of rectangular construction and ornamentation.

The jewelry of Oudh is of the same general style as that of Delhi and Lahore. It was formerly very celebrated, but has declined, owing to the destruction of the native court at Lucknow. The jewellers of this old royal city lost all their capital during the Mutiny of 1857, and have never since recovered their former position. Some jewellers, however, remain, and diamond cutters, who prepare the table diamond so popular in India, and the rose diamond. The finest and most elaborate jeweller's work in Lucknow only costs 6 per cent. on the value of the raw material. The artist of the highest pretensions is happy to work for two shillings a day, and eightpence a day is considered fair wages for a good workman.

The silver filigrain work [Plate 48] in which the people of Cuttack in Orissa have attained such surprising skill and delicacy, is identical in character with that of Arabia, Malta, Genoa, Norway, Sweden, and Denmark, and with the filigrain work of ancient Greece, Byzantium, and Etruria, and was probably carried into the West by the Phœnicians and Arabs, and into Scandinavia by the Normans, and in the course also of the mediæval trade between Turkestan and Russia. In Cuttack the work is generally done by boys, whose sensitive fingers, and keener sight enable them to put the fine silver threads together with the necessary rapidity and accuracy. It is quite distinct in character from the indigenous silver jewelry of the country, as will be seen from the illustration given.

Gold and silver filigrain work of great excellence is also produced at Murshedabad and Dacca in Bengal; and gold and silver jewelry of all kinds, rosaries, bracelets, necklaces, &c., at Monghyr; and silver ornaments at Potocakhalli in the Patna division. The silver jewelry of Dinajpur in the Rajshahye district is of highly interesting primitive forms [Plates 49 and 50]. At Sahibganj in the Dacca division imitation Dacca jewelry is largely made. From the Hindu drama "The Toy Cart" already quoted it is clear that the excellence of the imitation jewelry of India was recognised at a very early period. A question is raised in a court of justice about the identity of certain ornaments, whereupon the judge asks:

Judge.—"Do you know these ornaments?"

Mother.—"Have I not said? They may be different, though like. I cannot say more; they may be imitations made by some skilful artist."

Judge.—"It is true. Provost, examine them; they may be different, though like; the dexterity of the artist is no doubt very great, and they readily fabricate imitations of ornaments they have once seen, in such a manner, that the difference can scarcely be discernible."

The primitive character of Tibetan jewelry has already been noticed. A good deal of it now finds its way into India through Bhutan, Sikkim, Nipal, and Cashmere, chiefly in silver—ornamented with large crude turquoises, and sometimes with coral,—in the shape of armlets, and necklets, consisting of amulet boxes, strung on twisted red cloth, or a silver chain; and in various other forms, such as bracelets, anklets, &c., hammered, cut, and filigrained. It is identical in character with the jewelry so profusely represented in the Bharhut sculptures. The women of Ladak wear a curious ornament called a *parak*, which falls from the forehead over the head, down the back to the waist. It is covered with precious stones, and the wearer does not marry until she has possessed herself of enough of them to form a

goodly *parak*, which in fact constitutes her dowry. The silver Celtic brooch, described above, worn in certain of the Himalayan regions, is originally Tibetan.

Allusion has also been made above to the archaic silver jewelry of the Gonds, and at Sambalpur in the Central Provinces large quantities of these rude ornaments both in silver and gold are made.

In the Bombay Presidency the massive jewelry of Ahmedabad, square and padlock-looking, or round and ring-like, prevails all over Gujarat; nose-rings and ear-pendants, armlets, and necklaces, bracelets, zones, and immense anklets covered with bells. In the Dakhan the Marathas wear the graceful head ornaments called *kitak*, *nag*, *chandani*, *phal*, and *mohr*, and an armlet of a peculiar shape, caused by giving it a bend, by which it more firmly grasps the arm. Their anklets are chain-like, and altogether lighter and more refined than those worn by the Gujarat women. Plate 51 illustrates forms of necklaces and anklets commonly seen about Poona. The Mahomedans and Parsis of Bombay have ornaments peculiar to themselves, the Mahomedans in the Mogol style of India, and the Parsis of the traditional forms of the Sassanian period in Persia, but wrought by Hindu jewellers. Unfortunately, being an energetic, advancing people, the Parsis have, during the last fifty years, begun to give up this national jewelry in favour of the fashionable jewelry of Europe. The *repoussé* gold jewelry of Sawantwadi [Plate 50] in mythological designs is the best in Western India.

In the Madras Presidency superb gold and silver ornaments are made, as previously stated, at Tumkur in Mysore, and at Vizianagram [Plate 52] and Vizagapatam, and also at Tanjore, all in the mythological designs characteristic of Southern India. One of the best artists in this style twenty years ago were Messrs. "Vencatrungaraioo and Son, of Teroovatee, Eswer-Pattah," Madras. I used often to see his handiwork in Bombay. The gold jewelry of Trichinopoly, celebrated among Anglo-Indians,

has been corrupted to suit European taste; but nothing can exceed the technical excellence of the rose chains, and heart pattern necklaces and bracelets made in this city. The native jewelry of Trichinopoly [Plates 53 and 54] is similar to that of the Panjab. Silver filigrain work of the best description is produced by the jewellers of Travancore.

The jewelry of Ceylon in filigrain, chasing and *repoussé* work, is remarkable for the delicacy of its ornamentation in granulated gold, in the manner of the antique jewelry of Etruria, and for its exquisite finish.

A valuable list of jewels and ornaments worn by Mahommedan women in India is given in Herklot's *Quanoon-i-Islam*: and Mrs. Rivett Carnac's Catalogue of the peasant and savage jewelry exhibited by that accomplished lady at the Annual International Exhibition of 1872, is of very great value. It is printed in the Catalogue of the Indian Department of the Exhibition of that year, which contains several local lists of rare aboriginal jewelry from all parts of India. Mr. Baden Powell, in his *Handbook of the Manufactures and Arts of the Panjab* (Lahore, 1872), gives a complete list of the jewelry of that province, with illustrations of all its characteristic forms.

The few examples of jewelry in the collection of the Prince of Wales' Indian presents are exceedingly choice. The diamonds are particularly interesting. The Hindus value diamonds in jewelry solely for their decorative effect, but they most extravagantly prize them for themselves as a sort of talisman; and they particularly value them when the natural crystal is so perfect and clear that it requires only to have its natural facets polished. This is what jewellers call a point diamond, and there is a good example of one among the Prince's diamonds. If but slightly ground down it is called a deep table, or more expressively in French a *dou*. This is a very ancient form of diamond, and there is a perfect example of it in the Prince's collection. A flat shallow parallelogram is called a *lasque*, of which there are many examples

mounted on the arms, although most of them are mere chips and scales. The examples of rose diamonds and brilliants are probably of European cutting. The rose is a hemisphere covered with facets, and the brilliant, the ancient *clou*, cut above with thirty-two facets, and below with twenty-four. There are some fine Hindu necklets of pearls and enamel, and "tallow drop" emeralds; and chains, bracelets, and pendants starred with gems; but the loveliest jewel of all is a hair comb made at Jaipur [Plate 55]. The setting is of emerald and ruby Jaipur enamels painted on gold, surmounted by a curved row, all on a level, of large pearls, each tipped with a green glass bead. Below these lovely pearls is a row of small brilliants, set among the elegantly designed green and red enamelled gold leaves which support the pearls; then a row of small pearls with a brilliant-set enamelled scroll running between it and a third row of pearls, below which is a continuous row of minute brilliants, forming the lower edge of the comb, just above the gold prongs. It is superb in design, and one of the most finished pieces of Indian jewelry that has been made in modern times. The pearls are of very great price, and the whole effect is most brilliant, rich, and refined.

Scindia's great chain of pearls has been an heirloom in his family for generations. Three of the end pearls in a large pendant of flat diamonds and pearls are worthy of the "triple-gemmed earrings" [ἑρματα τρίγλινα μορόεντα] of Juno as described by Homer [*Il.* xiv 183]:

"Fair beaming pendants tremble in her ear,
Each seems illumined with a triple star."

And [*Od.* xviii 298]

"Earrings bright,
With triple stars that cast a trembling light."

Gem engraving is an immemorial Eastern art, as the cylinders of Nineveh and Babylon and Persepolis testify, and Delhi has

always been famous for its practice; as was Lucknow also before the abolition of the native court of Oudh. Among the prince's arms is a large emerald magnificently cut as a conventional rose. The old Delhi work in cut and gem-encrusted jade is priceless. The Chinese had cut jade for ages, but never ornamented it except by sculpture; but when it was introduced into India, the native jewellers, with their quick eye for colour, at once saw what a perfect ground it afforded for mounting precious stones, and they were the first to encrust them on jade. The Indian Museum possesses the choicest and grandest specimens of this work known, of the best Mogol period [Plates 56 and 57]. They were exhibited at the Paris Exhibition of 1867.

ART FURNITURE AND HOUSEHOLD DECORATION.

IF we may judge from the example of India, the great art in furniture is to do without it. Except where the social life of the people has been influenced by European ideas, furniture in India is conspicuous chiefly by its absence. In Bombay the wealthy native gentlemen have their houses furnished in the European style, but only the reception rooms, from which they themselves live quite apart, often in a distinct house, connected with the larger mansion by a covered bridge or arcade. Europeans, as a rule, and all strangers, are seen in the public rooms; and only intimate friends in the private apartments. Passing through the open porch, guarded on either side by a room or recess for attendants, you at once enter a sort of antechamber, in which a jeweller is always at work making or repairing the family jewels. Through the windows, across the court, the Brahman cook is seen among the silver drinking vessels and dishes preparing for the mid-day meal. In the opposite verandah, into which you next pass, some young girls are engaged under a matron embroidering silk and satin robes; and at the end of it a door opens and your host welcomes you heartily into his private parlour. He has sent for a chair for you, but sits on the ground himself, on a grass mat, or cotton *satrangi*, or Cashmere rug, with a round pillow at his back: and that is all the furniture in the room. Up country you may pass through a whole palace, and the only furniture in it will be rugs and pillows, and of course the cooking pots and pans,

and gold and silver vessels for eating and drinking, and the wardrobes and caskets, and graven images of the gods. But you are simply entranced by the perfect proportions of the rooms, the polish of the ivory-white walls, the gay frescoes round the dado, and the beautiful shapes of the niches in the walls, and of the windows; and by the richness and vigour of the carved work of the doors and projecting beams and pillars of the verandah. You feel that the people of ancient Greece must have lived in something of this way; and the houses of the rich in the old streets of Bombay, built before the domestic architecture of the people was affected by Portuguese influences, constantly remind you, especially in their woodwork, of the houses of the Ionian Greeks, as the learned have reconstructed them from their remains; and the woodwork is the essential framework, the solid skeleton, of native houses in Bombay, and is put up complete before a stone or brick is placed on it. The strict rectangular ground plan also of Bombay gardens, and the orderly and symmetrical method in which they are planted, two different species of trees, it may be the cocoa-nut palm and mango, or the cocoa-nut palm and areca-nut palm, being planted alternately all round the boundary, with other trees, pomegranates, oranges, jasmines, guavas, roses, cypresses, oleanders, and custard-apples, in regular rows and sections, is identical with the ground plan of the ancient Egyptian and Assyrian gardens. Your host has nothing on but a muslin wrapper, for he is about to have prayers performed, and, as he throws the wrapper off his shoulders and head, and girds it round his waist and sits down, a Brahman enters, and places the gods and sacred vessels before him, burning incense, and going through the customary forms and ceremonies; while your friend, if you are interested, explains them in their order. So an hour has passed, when a frugal meal, chiefly of unleavened bread and milk, is taken, and then, it being nearly two in the afternoon, an attendant comes in and dresses his master for the Legislative Council, of which he is a member. First he puts on him a soft

close-fitting jacket, and over it a long white cotton robe; then his stockings, of the finest Lille thread, are drawn on, and his feet placed in a pair of elegant French pumps; after which the turban is placed on his head, and a long waistband wound round his waist; and thus arrayed, with a heavily gold-mounted cane in hand, he at last issues forth, clothed, and altogether in another mind, into the outer world of English ideas and fashioning. He will, presently, drive down with you to the Town Hall to talk over, on the way, the Factory Bill he is so determined to oppose; but meanwhile you must extend your visit also to the drawing-room—which you know you have not seen since he has had it newly done up for the season. The first glance into it is sufficient to convince the most pampered slave of debilitating comfort that, in hot climates at least, furniture is foolishness.

Bombay Blackwood.

It is always the same furniture which is to be seen everywhere in these Bombay houses, made of the *shisham* or blackwood trees [*Dalbergia* sps.], and elaborately carved in a style obviously derived from the Dutch, although it is highly probable that the excessive and ridiculous carving on old Dutch furniture was itself derived from the sculptured idols and temples which so excited their astonishment when they first reached India. The carving is very skilful, but in a style of decoration utterly inapplicable to chairs, and couches, and tables, and looks absolutely hideous when "French polished," an "improvement" introduced during the last twenty years to suit European taste. When, however, this wood is used for the reproduction of the inlaid wooden doors of old Hindu temples, the effect is always good. It is very finely carved also at Ahmedabad in vases, inkstands, and other small objects, which being generally of pure native, or pure classical shapes and ornamentation seldom fail to please. The Ahmedabad carpenters have long been famous for their superior skill

in carving blackwood. Many of the best have left Gujarat for Bombay; but in Ahmedabad itself the finest specimens of this work are still to be found. Next to the Ahmedabad carvers, and in some respects with an even higher local name, are the carpenters of the neighbouring town of Dholera. Before the days of railway, it was the chief timber mart in the district. Here Lavana and Vania [Banyan] merchants bring logs of teak from Thana, and of blackwood and sandal-wood from Malabar, and sell them to the district carpenters, who work them up into chairs and tables, and cots and screens, and chests of drawers and almirahs of English fashion; and into handsome well-finished brass-bound boxes, much sought after in Kathiwar and even in the city of Ahmedabad. I once saw in a Parsi house in Bombay some stately blackwood couches, which had been designed in the Assyrian style from Rawlinson's *Ancient Monarchies*. The common jackwood [*Artocarpus integrifolia*] furniture of Bombay, rectangular in its forms, and simply fluted and beaded for its ornamentation, is far superior in taste to the blackwood furniture for which the place is celebrated.

Blackwood furniture is extensively made in the city of Madras also, but exclusively of European design.

The cabinet work of Monghyr in Bengal is well known. The principal woods used there are *tal* or palm [*Borassus flabelliformis*] and ebony, and the European articles of furniture made of them are highly prized in Calcutta.

According to the Brihat Sanhita, a celebrated work on astronomy by Varaha Mihira [quoted by Rajendralala Mitra], which dates from the sixth century A.D., the woods most esteemed by the Hindus of India for furniture are *asana* [*Pentaptera tomentosa*], *syandana* [*Dalbergia Oogeinensis*], *chandana* [*Santalum album*, sandalwood], *haridra* [*Mesua ferrea*], *suradaru* [*Pinus Deodara*], *tinduki* [*Diospyros glutinosa*], *sala* [*Shorea robusta*], *gambhar*, or *kasmari* [*Gmelina arborea*], *anjana* [*Michælia Champaca*—query, *Memecylon tinctorium*]

padmaka [?], *taka* [*Tectona grandis*, teak], and *sinsapa*, [*Dalbergia* sps., or Bombay blackwood]. *Tun* [*Cedrela Toona*], and *phanas* [*Artocarpus integrifolia*], both now much used in Indian furniture, it will be observed are not named in this list. The Silpa Sastra, on mechanics and architecture, and some of the Puranas, give detailed directions for felling these trees at particular seasons, when their circulation is inactive; and for seasoning the wood afterwards, so as to prevent unequal contractions and cracks in drying. Trees which have been struck down by lightning, or borne down by inundations, storms, or elephants; which have fallen towards the south quarter [Yama's]; or which grow on burial, or burning, or other holy ground, or at the confluence of large rivers, or by the public road side; or which are withered at the top, or are entangled with heavy creepers; or which have become the habitation of birds, or bees, &c., &c., may not be used. Some trees, such as the *gambhar*, *asana*, and sandalwood are most auspicious when used singly; others when used jointly, as teak with *sal*, and *hariadra* with *kadamba*. *Sinsapa* (i.e. blackwood) and mango-wood should never be used singly, as in the mongrel blackwood furniture of Bombay, Ahmedabad, Surat, and Madras.

Sandalwood is the most auspicious of woods for furniture, especially when mounted with gold and jewels; but the most prized of all materials, particularly for bedsteads, is ivory. Among the Prince of Wales' Indian presents is an ivory cot from Travancore, which is a remarkable example of the skill of the ivory turners of that native state. A four-post bedstead of graven parcel-gilt silver, with red and yellow hangings of needle-worked embroidery, is one of the many gifts of the Maharaja of Cashmere. The four-post bed was unknown in ancient India. The bedsteads represented in the sculptures resemble those of the ancient Egyptians, and the modern Indian *char-pai*, or frame of netted rope supported by "four-feet." For men of consequence and wealth the rope netting is replaced by broad bands

of tape stretched and plaited across the frame [*palang*], or by boards of wood or ivory [*takta-post*]; the planks and legs being ornamented with carving and painting, or lacquered decoration, as in the bedsteads of Sindh and the Panjab.

Although chairs are not ordinarily used by the natives of India, they have always been familiar to them as the thrones of kings. Thrones of gold are mentioned in the Rig-Veda, the Ramayana, and Mahabharata. When Bharata returned from his visit to Rama, his mother is represented as springing toward him "from her golden throne." On the old sculptures thrones are seen of the same shape as the hour-glass shaped cane *morahs*, or stools, still made in many parts of India, the forms of which are obviously derived from the lotus thrones of the gods. The general Hindu name for thrones is *rajapatra* and *rajasana*. They are also called *sinha-sana*, or the "lion-seat," a name derived from the figures of lions which were generally carved on their supports. A throne sculptured with the lotus for its supports is called *padma-sinhasana*, or "lotus-seat;" if with an elephant, *gaya-sinhasana*; with a conch-shell, *sanka-sinhasana*; with a goose, *hansa-sinhasana*; if with an antelope, *mriga-sinhasana*; or if with a horse, *haya-sinhasana*. If it be supported by Vishnu's bird Garuda, it is called *Garudasana*; if by Siva's bull, Nandi, *Brishana*; and if by a peacock it is called *Karttikeyasana*. In making thrones, gold, silver, and copper are most used. Iron is condemned, except for seats of incantation. Of stones, gritty sandstone is forbidden; and the colour of any stone used should be that of the planet presiding over the destiny of the person for whom the throne is made. A man born under Saturn should use a blue-colored stone for his throne, or seat; if born under Venus, a yellow stone. Crystal is always an auspicious stone to use. Travelling thrones, like sedans, raised on four poles, to be borne on men's shoulders, and state palanquins, are made as light as possible, generally with an ivory framework, and plain or brocaded silk hangings. A silver throne was

presented to the Prince of Wales, by a "penny subscription" among the priests of Madura. It is a striking object, and its ornamentation is reproduced directly from the architectural details of the celebrated temples of that city. The whole art of the Madras Presidency has been in this way influenced by its ecclesiastical architecture, in the same way as the arts of Cashmere have been influenced by the characteristic temple architecture of the valley. A state palanqueen was also presented to the Prince by the Princess Bobili, of Vizagapatam work in ebony and ivory. Although the details of the decoration are European, consisting of scrolls of convolvuluses and fuchsias, etched in black on the ivory, the general effect is most pleasing; and it is very richly and prettily furnished inside. Mr. Wentworth Beaumont, M.P., possesses a deep-seated white marble throne, which is a superb example of the stone-carved work of Jaipur. The golden throne of Ranjit Sing ["the lion of the Panjab," 1798-1839] in the India Museum, is an object of great artistic as well as historical interest. It is of pure Hindu form, like that of the hour-glass shaped cane *morahs*, already noticed, and the lotus thrones on which the gods are represented in Indian paintings and sculptures.

The famous "peacock" throne of Delhi has long since disappeared. It was made for the fourth Mogol Emperor, Shah Jahan, A.D. 1627—1658, at a cost of over £6,000,000, and took its name from the peacock with spread tail, represented in all the glory of nature's coloring, by sapphires, emeralds, rubies, topazes, and enamel, which formed its chief decoration. The body of the throne also was a mass of diamonds and precious stones. It was carried off by Nadir Shah when he sacked Delhi, A.D. 1738-9.

Bombay Inlaid Work, and Ahmedabad Mother of Pearl Work.

A good deal of ornamental furniture is also made in "Bombay inlaid work," so familiar now in the ubiquitous glove-boxes, blotting-cases, book-stands, work-boxes, desks, and card cases, which

go by the name of "Bombay boxes." They are made in the variety of inlaid wood work, or marquetry or tarsia, called *piqué*, and are not only pretty and pleasing, but interesting, on account of its having been found possible to trace [see my paper in the *Journal of Bombay Asiatic Society*, vol. vii, 1861-63] the introduction of the work into India from Persia, step by step, from Shiraz into Sindh, and to Bombay and Surat. In Bombay the inlay is made up of tin wire, sandal-wood, ebony, *sappan* [brazil] wood, ivory, white, and stained green, and stag horn. Strips of these materials are bound together in rods, usually three-sided, sometimes round, and frequently obliquely four-sided, or rhombic. They again are so arranged in compound rods, as, when cut across, to present a definite pattern; and in the mass have the appearance of rods of varying diameter and shape, or of very thin boards, the latter being intended for borderings. The patterns commonly found in Bombay, finally prepared for use, are *chakar-gul*, or "round bloom;" *katki-gul*, "hexagonal bloom;" *tinkonia-gul*, "three-cornered bloom;" *adhi-dhar-gul*, "rhombus bloom;" *chorus-gul*, "square [matting-like] bloom;" *tiki*, a small round pattern; and *gandirio*, "plump," compounded of all the materials used; also *ek dana*, "one grain," having the appearance of a row of silver beads set in ebony; and *pori lihur*, *jafran marapech*, *jeri*, *baelmutana*, *sankru hansio*, and *poro hansio*, these eight last being bordering patterns. The work was introduced into Sindh from Shiraz, about 100 years ago, by three Multanis, Pershotum Hiralal, and the brothers Devidas and Valiram. A number of people acquired the art under them, and about seventy years ago it was introduced into Bombay by Manoredas, Nandlal, Lalchand, Thawardas, Rattanji, Pranvalab, and Narrondas, who educated a number of Parsis and Surat men, by whom it was carried to Surat, Baroda, Ahmedabad, and elsewhere. Fifty masters, all of whose names I have recorded, and about seventy-five apprentices under them, were engaged in the work in Bombay in 1863, of whom Atmaram Vuliram, and Parshostam

Chilaram had been established in the Kalbadavi ward ever since its introduction sixty years before. One of the most intelligent craftsmen at present in the trade is Framji Hirjibhai. In Surat there are thirteen families of inlayers, of whom eight are Parsis and five Hindus. Tin wire is used in the work in Western India instead of brass, as in Persia, where also it is always varnished. The same inlaid work is made in Egypt and Algiers, and it is similar to the tarsia or marquetry of Italy and Portugal, and the Roman work known as *opus cerostrotum*. It is also, I believe, identical with the inlaid work of Girgenti and Salerno, although in this the patterns are floral, and not geometrical, for I found by a comparison of the two varieties in Paris, that there was not a single geometrical pattern in the Bombay work which cannot be traced back to a flower in the work of Girgenti and Salerno. The Egyptians also obviously worked in tarsia. The art is said to have died out of Europe, and to have been again reintroduced at Venice from the East. More probably it remained an unbroken tradition in the Mediterranean, and was revived by the Saracens. At Goa, rare old caskets, coffers, and other examples of it, of the same style as the Portuguese sixteenth and seventeenth century tarsia, and evidently the *chefs-d'œuvre* of patient Hindu hands, are sometimes to be found by the insidious *virtuoso*, but otherwise there is not a trace of such articles, so far as I am aware, in India, except what has come during the last 110 or 120 years from Persia.

Thus I wrote in the *Handbook to the Indian Court*, at the Paris Exhibition of 1878, but it is certain that inlaying in mother of pearl was at one time practised in great perfection at Ahmedabad, although the process is now almost extinct. I never saw any sample of it, but it was apparently identical with tarsia work. It is to be found on the wooden canopies over the shrines of Shah Alam at Sarkhej, and on stone in the marble tomb of one of the Sultan Ahmad's queens. "The simpler designs," writes Mr. E. S. P. Lely, in vol. iv. of the *Bombay Gazetteer*, 1879,

p. 139—"were formed by filing pieces of mother of pearl to the required size, and letting them into the pattern cut in the block of wood. The more elaborate designs were, with fragments of different colored mother of pearl, worked into cement, and laid on the surface to be ornamented. Of the coarser and commoner kinds of inlaying a little is still used for the frames of *tamburas*, *rubabs*, and other guitars and violins. No one now practises the former kinds of inlaying, and only one man supports himself by inlaying musical instruments."

I was not aware of the existence of any remains of this beautiful art in India until I read Mr. Lely's report: and I trust that a successful effort may now be made, through the patronage of the South Kensington Museum Department, to revive it.

Mr. J. L. Kipling also, in the *Lahore Guide*, 1876, says that "at Hushiarpur" [in the Panjab] "is practised a variety of the ancient Persian craft of inlaying dark wood with ivory. The *certosina* work of Italy is similar."

Vizagapatam Work.

Vizagapatam work, in ivory, bison and stag horn, and porcupine quills, is applied to the same class of articles as Bombay inlaying, namely, work-boxes, tea-caddies, desks, chess-boards, and a variety of fancy articles. It is of a very recent origin, and the etching in black, *sgraffito*, on the ivory, is exclusively of European flower forms, represented naturally, in light and shade. The effect is seldom pleasing.

Mynpuri Work.

In Mynpuri work, which is analogous to buhl-work, we find boxes and platters of a rich brown wood inlaid with brass wire in various geometrical and scroll patterns. Sir John Strachey, who has given great encouragement to this local industry, exhibited several examples of it at Paris. It is curiously like the wood inlaid with wire seen in Morocco, and it would be interesting

to inquire after the history of its introduction at Mynpuri, where it goes by the name of *tarkashi*, or "wire work"; a word which suggests the possible etymology of the word *tarsia*.

Inlaid Work of Agra.

The mosaic work of Agra [Plate 58], an inlay of crystal, topaz, pearls, turquoise, carnelian, jade, coral, amethyst, blood-stone, carbuncle, sapphire, jasper, lapis-lazuli, garnets, agates, and chalcedony on white marble, is also chiefly applied to ornamental furniture and household *objets d'art*. It originated in the exquisite decorations of the Taj at Agra [A.D. 1627-1658] by Austin de Bordeaux, and, after almost dying out as a local industry, on the dissolution of the Mogol Empire in 1803, was revived about thirty years ago through the exertions of Dr. J. Murray, late Inspector-General of Hospitals, Bengal. Nearly all the specimens of this work in England, at Windsor and elsewhere, were produced under his fostering care. While Florentine in origin and style, the designs have a thoroughly local character of their own, and, unless influenced by injudicious European direction, adhere strictly to the principles and methods of Indian ornamentation. The mosaic being laid on the brilliant white marble of Jaipur, is liable, however, to look vulgar, unless the stones used for it are very judiciously selected.

In the local *Guide* Mr. Kipling refers to the inlaid work of Lahore, of the time of the Mogol Emperors, which would appear to be similar to that of Agra. "There is," he writes, "a small though costly marble pavilion, inlaid with flowers wrought in precious stones, and known by the significant name of *Naulakha*, or the building which cost nine lakhs [90,000*l.*]. This delicate and beautiful work belongs to the time of Aurangzib; [the sixth Mogol Emperor, A.D. 1658-1707]. . . . The inlay, much of which has unfortunately been destroyed, is remarkable for

excessive minuteness and finish of execution. In this, as in the later work of most styles of art, mechanical virtuosity (to employ an expressive Germanism) was beginning to usurp the place of originality and purity of design."

The substructures of the palace of Akbar [A.D. 1556-1605] at Agra are of red sandstone, but nearly the whole of its corridors, chambers, and pavilions, are of polished white marble, wrought with mosaics and carvings of exquisite ornament. The pavilions which overhang the river are inlaid within and without in rich patterns of jasper, agate, carnelian, bloodstone, and lapis lazuli, and topped with golden domes. "But the most curious part of the palace," adds Captain H. H. Cole, R.E., in his *Catalogue of the Objects of Indian Art exhibited in the South Kensington Museum*, 1874, "is the *Shish Mahal*, or 'Palace of Glass,' the chambers and passages of which are adorned with a mosaic of mirrors, arranged in geometrical patterns." Captain Cole is unable to determine whether this building was the work of Akbar or of Shah Jahan [A.D. 1627-1658], but believes that it was built by the latter.

Mr. Kipling minutely describes the examples of this strange mirror mosaic, or *shish*-work, to be seen in the *Shish Mahal* at Lahore. "The building," he says, "is the work of both Shah Jahan and Aurangzib; and the more gaudy portions are due to the later times of the Sikhs. The effect of the *shish*, or mirror mosaic, though brilliant, narrowly escapes the charge of vulgarity. The principle on which the work is constructed, particularly in its application to ceilings, is identical with that of many examples at Cairo, and in other places all over the East. Small pieces of wood of suitable geometrical forms, frequently hexagonal, are cut out and inlaid with bits of looking-glass, more or less gaudily painted and gilded, separately; and when all are ready, they are joined together on the ceiling, and the process is by no means so slow and costly as the finished result would lead one to suppose."

Mosaic obviously originated in pavement, and the introduction of ornamental pavement was probably suggested by Oriental tapestry. A pavement, *pavimentum*, is strictly a flooring [δάπεδον, whence δάπης, and τάπης, a carpet or rug,—laid on the floor] or *stratum*, composed of flags, slabs, or pebbles, bricks, tiles, or shells, set in a cement, and beaten down [*pavio*] with a rammer or *pavicula*; and the classical writers [Pliny, Bk. xxxvi] distinguish pavements by different names, according to their situation, structure, and decoration.

The paved floors of rooms and passages were designated *pavimenta subtegulanea*, and pavements in the open air, particularly those laid on the flat roofs of houses, *pavimenta subdialia*. The *pavimentum sectile* was composed of different-colored marbles cut [*secta*] into regular forms, such as *favus*, like the cells [hexagons] of a *honeycomb*; *trigonum*, triangular; *scutula*, rhomb-shaped; and *tessera*, with its diminutive *tessella*, a cube.

All these forms might be not only of cut marble or other stone, but of glass or other composition. The *abaculus* [ἀβακίσκος] was a small tile or die [*tessera*] of glass, or other composition, stained of various colors in imitation of precious stones.

The *pavimentum tessellatum*, or *tesseris structum*, was a sectile pavement, composed of large *tesserae*.

The *pavimentum vermiculatum* was composed of smaller *tesserae*, arranged, not in diapers and geometrical figures, but so as to represent natural objects, as in pictures, by lines of embedded *tesserae*, which necessarily turned and twisted about like the tracks of worms. This vermicular mosaic was divided into *opus majus*, composed of larger *tesserae*, *opus medium*, of smaller, and *opus minus vermiculatum*, composed of very minute and delicate *tessellae*, almost *spiculae*.

In the *pavimentum sculpturatum* the marble was cut out in the shape of the figures intended to be represented in the mosaic,

and was further engraved after the manner of the Triqueti marbles in the Albert Memorial Chapel at Windsor.

The *pavimentum testaceum* was composed of broken tiles or potsherds.

The *pavimentum lithostrotum*, literally stone *stratum* or street, was the ordinary pavement of Roman roads, laid with polygonal blocks or flags of silicious lava.

The *pavimentum optostrotum*, literally baked [*ὀπτός, coctus*] *stratum* or street, was a pavement of bricks. Often the oblong bricks were laid in imitation of the setting of the seed grains in an ear or spike of corn [*spica testacea*], or, as we say in England, herring-bone ways, as may be seen in the walls of Pevensey Castle and other old Roman masonry.

Gradually the word *lithostrota* came to signify mosaics in the modern sense exclusively. Thus Pliny [Bk. xxxvi, ch. 25] says: "Pavimenta originem apud Græcos habent elaboratâ arte, picturæ ratione, donec lithostrota expulere eam."

Again, the Greek word for mosaic, *ψήφωσις*, from *ψῆφος*, a pebble, also indicates the origin of the art in pavement. The word mosaic is said by Hendrie to be derived from the Arabic *mosque*, but it came into use long before the rise of the Saracens. It is first used by Ælius Spartianus, one of the "Scriptores Historiæ Augustæ," in the biography of Pescennius Niger, A.D. 293; and later by Trebellius Pollio, A.D. 320; and Aurelius Augustus, A.D. 430; and the word is clearly from the Greek *μουσείον*, a temple of the Muses; Latin, *Musium*, *Musivum opus*; Italian [through the Greek, and not Latin], *mosaico*; Spanish, *mosaico*; French, *mosaïque*, and so English, mosaic.

The *Alexandrinum opus* of the third and fourth centuries A.D. was a mosaic pavement laid in elaborate geometrical figures, and the direct forerunner of the characteristic arabesque work of the Saracens. By mosaic proper, *Musivum opus*, has always been understood a picturesque or other ornamental design formed of small pieces of marbles or other stones, or of glass or other

composition, used chiefly for the decoration of walls and ceilings, and personal ornament. This is indicated by the specific Greek name for true mosaic, *ψῆφοι χρύσειοι*, evidently referring to the use of gilded glass *tesserae* in the mosaics of the Byzantine period, the manufacture of which [*tesserae*] is so lucidly described by Theophilus the Monk [10th–12th cent. A.D.], Bk. ii, ch. xv, “*De vitro Græco quod Musivum opus decorat.*”

“*Vitreas etiam tabulas faciunt opere fenestrario ex albo vitro lucido, spissas ad mensuram unius digiti, findentes eas calido ferro per quadras particulas minutas, et cooperientes eas in uno latere auri petula, superliniunt vitrum lucidissimum tritum ad supra. Hujusmodi vitrum interpositum Musivum opus omnino decorat.*”

The earliest notice of mosaic is in the Bible in the story of Esther [*circa* B.C. 450], where, in the account [ch. 1] of the six months' feasting held by Ahasuerus [Xerxes] to arrange the third invasion of Greece, we are told [v. 6] in the description of the palace of Shushan, “the beds were of gold and silver, upon a pavement of red [porphyry], and blue [lapis-lazuli], and white [alabaster], and black marble.” Mosaic pavements have not been found in the remains of Egyptian, Babylonian, and Assyrian temples and palaces, but true mosaics have been found as a decoration of mummy cases. The Greeks carried the art to marvellous perfection, and Pliny naturally enough ascribes its origin to them. He particularly mentions the *pavimentum asarotum* of the Greek artist Sosus of Pergamus, representing the remains of a banquet, shewn on an apparently unswept [*ἀσάρωτος*] floor. “The doves of Pliny,” represented with one drinking, and the others sunning and pluming themselves round the rim of a water-bowl, are universally known through the copies which have been reproduced of them in all ages and countries. The most interesting and valuable of all the ancient pictorial mosaics which have been preserved to our time is the one which was found at Pompeii, in “the house of Pansa,” representing the battle to

Issus. The mosaics of the classical period are severe in design and chaste in coloring, but, as the influence of Indian art gradually spread over the Mediterranean countries, rich colors and even gold were gradually more and more introduced into the mosaics of the Lower Empire, and give them their distinctive character.

After the fall of the Western Empire the art seems to have perished out of Italy, until it was revived in the 13th and 16th centuries, and the revival was through the Byzantine Greeks, as is indicated by the Greek form of the Italian word *mosaico*.

The Saracens had from the first used glazed tiles for covering walls and roofs and pavements, and of course with a view to decorative effect. The use of these tiles had come down to them in an unbroken tradition from the times of the Chaldean monarchy, the Birs-i-Nimrud, or Temple of the Seven Spheres at Borsippa, near Babylon, of the Pyramid of Sakhara in Egypt, and of the early trade between China and Egypt, and the valley of the Tigris and Euphrates. Glazed tiles had, however, fallen into comparative disuse in the East before the rise of the Saracens, and it was the conquest of Chingiz Khan, A.D. 1206-1227, which would appear to have brought about their general use throughout the countries of Islam. That the Saracens indeed derived the art of true mosaic direct from the Greeks is proved by their calling it *sephisa*, from the Greek *ψήφωσις*. When the Caliph Walid invaded Palestine, one of the conditions of peace he made with the Cæsar at Constantinople was that he should furnish a certain quantity of *sephisa*, which he had seen in the church at Bethlehem built by the Empress [St.] Helena, for the decoration of the mosque he was building at Damascus.

The use of inlaid stone in true mosaic work by the Mogols in India was principally due to the revival of the ancient art in Italy. The Italians of the Renaissance developed two distinct forms of inlaying in stone, the Roman mosaic of modern jewellers, which may be compared to the *opus minus vermiculatum*, and

the Florentine, composed of thin slices of different-colored stones, chiefly quartzose, cut to the shape of the form they are intended to represent, the petal of a flower, the wing of a bird, or whatever it may be, and set in white or black marble with cement, of which in good work not a trace should appear between the encrusted stones and the marble, not even when seen through a magnifying glass. It was this Florentine form of mosaic in *pietra dura* which was used by Austin de Bordeaux in the decoration of the glorious Taj-Mahal, and which has become naturalised as a local art at Agra. Austin's earlier work at Delhi appears to have been purely imitative, as may be seen from several specimens of it now in the India Museum. The mosaic representing Orpheus is interesting from its being supposed to be a portrait of Austin himself. It was looted at the recapture of Delhi from the mutineers in 1857, and was purchased for the India Museum from Sir John Jones. At present the chief inlayers at Agra are two Hindus named Nathu and Parusram. The *pavimentum Græcanicum* of Pliny was a concrete composition of charcoal, sand, lime, and ashes, rammed down and polished to represent black marble. Omitting the charcoal, this is pretty much the composition of the "*chunam*" walls and floors, in imitation of white marble, which are seen all over India in superior houses, and in the Madras Presidency in particular are remarkable for their high polish and real look of white marble. The commoner *chunam* stucco, made of *kankar* and pounded sand, is indeed the Roman *arenatum*, and the finer sort, in which pounded marble or calc-spar is substituted for sand, is the Roman *marmoratum*. When this stucco is decorated in various designs, as a sort of false mosaic, it may be compared to the painting in colored plasters which has long been recognised in Europe as a special art. In *al fresco* painting the colours are soaked into the plaster, while it is still damp, and thus the design is indelibly fixed to the hardening surface. In a *tempera* painting the colours, mixed with size to make them adhere, are put on the plaster after it has hardened. Often the background of a

composition is painted in *al fresco*, and the figures of the foreground in *a tempera*. When the plaster is etched, in a manner resembling the *pavimentum sculpturatum*, the work is called *sgraffito*. The term encaustic painting, now used only for the painting of glazed tiles, was first applied to a *tempera* painting, in which the vehicle of the colours used was wax, spread over the surface of the stucco with a heated iron, or "actual cautery."

Sandalwood and other Wood Carving.

Sandalwood carving is chiefly carried on in the Bombay Presidency, at Surat, Ahmedabad, Bombay, and Canara; and in the Madras Presidency, in Mysore and Travancore. It is applied to the same articles as the Bombay inlaid work. Indeed the generic term "Bombay boxes" includes the sandalwood carving of Ahmedabad, Surat, and Bombay, as well as inlaid wood; but wood carving is a far superior art to inlaying, and in India is as ancient as the temple architecture and the carved idols in which it probably originated. The Surat and Bombay work is in low relief, and the designs consist almost entirely of foliated ornament; the Canara and Mysore work [Plate 59] is in high relief, the subjects being chiefly mythological; and the Ahmedabad work [Plate 60], while in flat relief, is deeply cut, and the subjects are mixed floral and mythological; for instance, Krishna and the Gopies, represented not architecturally as in Canara carving, but naturally, disporting themselves in a luxuriant wood, in which each tree, while treated conventionally, and running into the general floral decoration, can be distinctly recognised. A line is drawn below the wood, and through the compartment thus formed a river is represented flowing, as on Greek coins, by an undulating band, on which tortoises, fishes, and water-fowl are carved in half relief. The best Canara carving comes from Compta, and the best

Mysore, which is identical in every respect with that of Canara, from the town of Sorab in the Shimroga district. The most beautiful example of Mysore sandalwood carving ever seen in this country was a little cabinet exhibited by Major Puckle in the Annual International Exhibition of 1871. It was surmounted by a triangular headboard on which were carved Brahma and Saraswati in the centre, and Siva on Nandi on one side, and Siva and Vishnu coalesced in Krishna on the other; the outline of this headpiece being waved in a manner to represent the mystic trilateral monosyllable AUM. On either side of it was an elephant waving a *chauri* in its trunk; and below it a narrow border on which were carved Lakshmi, Parvati, Garuda, Hanuman, and other of the gods, all in a row. On the right door of the cabinet Vishnu on Garuda, with Lakshmi by his side, was represented in the centre, surrounded by the forms of his ten avatars; and on the left door, Siva on Nandi, with Parvati by his side, was represented in the centre, surrounded by the guardians of the eight quarters of the earth, Indra, Agni, Yama, Nirritu (who in Madras always takes the place of Surya), Varuna, Vayu, Kubera, and Isana (who in Madras always takes the place of Soma). The sandalwood carving of Travancore is perfectly naturalistic in style, and Plate 61 represents a characteristic and unique example of it.

A little sandalwood is carved at Morahabad in the North-Western Provinces. Ebony is excellently carved at Bijnur, another town of the Rohilkhand division of the North-Western Provinces, and in a similar conventional style at Monghyr in Bengal. The designs on these boxes are generally geometrical; and latterly I have seen them inlaid with ivory in the manner of the old Sicilian tarsia work.

The blackwood carving of Bombay, Ahmedabad, and Dholera, has already been mentioned. Teak for the beams and pillars, brackets, and door-posts, and the doors of native houses, is carved in the Rajapur and Deogarh *talukas* of the Ratnagiri Collectorate.

Saharanpur, in the North-Western Provinces, has also obtained a name for its wood carving, and the town of Harpanhalli, in the Bellary district of the Madras Presidency. Indeed, wood carving for architectural use is practised with more or less success in almost every village in India. The gods are everywhere carved in wood. Wooden hair combs are also universally carved; and the manufacture of combs in blackwood is a speciality of the villages of Jeswada and Gangdi in the Dohad district of the Panch Mahals in Gujarat. Wooden bracelets are also universally turned, as will be more properly noticed under Lac-work.

Carved Ivory, Horn, and Tortoiseshell.

Ivory is carved all over India, but chiefly at Amritsar, Patiala, and Delhi, in the Panjab; at Benares, Behrampore, and Murshedabad, in Bengal; at Surat, Ahmedabad, Damam, Balsar, and throughout Southern Gujarat, and at Sattara, in the southern Maratha country, in the Bombay Presidency; and at Travancore, Vizagapatam, and Vizianagram, in Madras. The subjects are generally richly caparisoned elephants, state gondolas in gala trim, tigers, cows, and peacocks, all carved as statuettes; and hunting, festive, and ceremonial scenes, and mythological subjects carved in relief. The carved ivory combs [Plate 62] found in every Indian bazaar are also most artistic in form and detail. Sylhet, in the Dacca division of Bengal, is noted for its ivory fans; and Ratlam, in Western India, for its costly ivory bracelets. Recently a colony of ivory turners has settled at Kurigram in the Rajshahye division of Bengal. Bison horn is carved into figures and otherwise wrought at Ratnagiri, Sawuntwadi, and elsewhere. Tortoise shell is worked into armlets and bracelets and other ornaments in Gujarat, and in the city of Bombay.

Carved Stone.

The agate vases of Baroach and Cambay have been famous under the name of Murrhine vases from the time of Pliny. The best carnelians and agates are found at Ratanpur near Baroach, and are taken to Cambay to be worked into cups, saucers, knife-handles, paperweights, beads, bangles, and other ornaments. Animals are carved in black chlorite at Gaya in the Patna division of Bengal; and in white marble and reddish sandstone [Plate 63] at Ajmir and other places in Rajputana; and we find the same truth of representation in these stone carvings as in the best ivory carvings of Amritsar, Benares, and Travancore. In Rajputana also idols are largely carved in white marble, and brilliantly colored in red, green, yellow, and blue paint and gold. Jade is still carved in Cashmere. At Fattehpur Sikri models in soapstone are made of the celebrated Mahommedan ruins of that city; and it is also carved into ornamental dishes, inkstands, and other objects. Soapstone ornaments are also made at Gohari in the North-Western Provinces. In Singbhum and Manbhum, in the Chota-Nagpur division of Bengal, there are large masses of soapstone, which the people have for ages worked into platters and cups. On the Nilgiri estate close to Balasore in Orissa, a black chlorite is obtained which is also worked into cups and dishes. Soapstone and potstone ware are manufactured at Tambulghata, and at Kanheri and Pendri, in the Central Provinces. At Nagpur, where in former times the art of stone and wood carving reached a high degree of perfection, there are still many excellent stone carvers among the masons. The art has to a certain extent fallen into disuse, but efforts are being made to revive it. The Chanda masons also are very skilful in carving stone. The stone carvers of Katch and Kathiwar are celebrated all over Western India.

The early Mahommedan architecture of Ahmedabad has been remarkably influenced by these clever Hindu masons. Afterwards the taste of their Mahommedan masters reacted on their own work, as is strikingly seen in the Jaina temples of Palitana and other parts of Gujarat. At Malwan and Patgaum, in the Ratnagiri Collectorate of the Bombay Presidency, a soft slaty stone is carved into cups after the schistose models imported into Western India from Persia. The masons of Sargiddapanam in Nellore [Madras] are noted for their stone sculpture on the native towers called Galegopurams; and those of Buchereddipalem for their sculpture on the granite pillars of the local temples. The masons also of Udayagiri in this district are skilled in stone carving. The masons of Tumkur in Mysore are specially noted for the stone idols they carve. Stone jugs are largely manufactured at Kavaledurga in Mysore.

Captain Cole, R.E., who has paid special attention to the ancient stone sculptures of India, in his *Catalogue to the Objects of Indian Art exhibited in the South Kensington Museum*, 1874, classifies them in the two divisions :—

I. Statues and bas-reliefs.

II. Decorative sculpture for architectural purposes.

Under the head of statues and bas-reliefs he enumerates :—

1. The Buddhistic figure sculptures of the Asoka edict pillars, and of the Sanchi and Amaravati topes; and the Græco-Buddhistic remains in the Peshawur district.

2. The Jaina sculptures, of the twenty-four hierarchs or chat sect in Rajputana, at Gwalior, at Benares, and Mahoba, and in Bandelkhand.

3. The Brahmanical bas-reliefs of Pandrethan and Marttand in Cashmere, at Bindraband, at Eran and Pathari near Bhilsa, at Khajuraho in Bandelkhand, and at Puri in Kattack.

4. The Mahommedan sculptures, consisting of the two carved elephants which formerly stood outside the gates of Delhi, and similar statues at Fattehpur Sikri and Ahmedabad.

The best examples of decorative sculptures are :—

1. The Buddhist, of the Sarnath, Sanchi, and Amravati topes, and the caves of Ellora, Kanheri, and Ajanta.

2. The Jaina, of the temples of Mount Abu, at Khajuraho, the ancient capital of Bandelkhand, at Sonari, and in the fort at Gwalior.

3. The Brahmanical at Avantipur in Cashmere, of the temples at Benares, and at Bindraband, at the Kutub at Delhi, of Tirumulla Nayak's [Trimul Naik's] Choultri at Madura, and the Kylas at Ellora.

4. The Mahommedan, namely :—

(a) The Pathan, decorative carving of Kutub-ud-din's gateway at Delhi, A.D. 1193; the Kutub Minar, at Delhi, A.D. 1200; and the palace at Ahmedabad.

(b) The Mogol, of the palaces at Fattchpur Sikri, and the Taj Mahal at Agra.

According to Captain Cole, the elaborate Hindu carvings which covered the massive stone masonry of the temple of Avantipur in Cashmere, and which were of the ninth century of our era, supply the examples to which northern Hindu sculpture of the present day owes much of its origin. The quaint horizontal decorative treatment of Hindu sculpture in the tenth century pillars of ancient Delhi enters into the modern designs of that city; and the twelfth century surface ornamented bas-reliefs of the Pathans at the Kutub are still commonly the types of Delhi art. In the Bombay Presidency the Jaina carvings of Vimala Sah's temple at Mount Abu, erected *circa* A.D. 1052, indicates the origin of much that characterises modern Bombay carvings; while the Mahommedan Ahmedabad buildings of the fifteenth century point clearly to the art which gave birth to the ornament which is so prolific at that place. At Madras the carvings on the pillars of Trimul Naik's Choultri, executed in the early part of the seventeenth century, are good illustrations of the source of the modern art of Madras.

Clay Figures.

Figures in clay, painted and dressed up in muslins, silks, and spangles, are admirably modelled at Kishnaghur, Calcutta, Lucknow, and Poona. Fruit is also modelled at Gokak, and other villages in the Belgaum Collectorate of the Bombay Presidency, and at Agra and Lucknow. The Lucknow models of fruit are so true to nature as to defy detection until handled. The clay figures of Lucknow are also most faithful and characteristic representations of the different races and tribes of Oudh; and highly creditable to the technical knowledge and taste of the artists. They are sold on the spot at the rate of four shillings the dozen. Wall brackets, vases, clock-cases, and other articles are also manufactured out of the tenacious clay at the bottom of the tanks in Lucknow; but they are in a very debased style, being modelled after the Italian work which is to be found all over Lucknow, the old Oudh Nawabs having largely employed Italian sculptors in the building and decoration of their gardens and palaces.

It is very surprising that a people who possess, as their ivory and stone carvings and clay figures incontestably prove, so great a facility in the appreciation and delineation of natural forms should have failed to develop the art of figure sculpture. Nowhere does their figure sculpture shew the inspiration of true art. They seem to have no feeling for it. They only attempt a literal transcript of the human form, and of the forms of animals, for the purpose of making toys and curiosities, almost exclusively for sale to English people. Otherwise they use these sculptured forms only in architecture, and their tendency is to subordinate them strictly to the architecture. The treatment of them rapidly becomes decorative and conventional. Their very gods are distinguished only by their attributes and symbolical monstrosities

of body, and never by any expression of individual and personal character.

So foreign to the Hindus is the idea of figure sculpture in the æsthetic sense, that in the noblest temples the idol is often found to be some obscene or monstrous symbol. It is owing, I believe, to the very fact of their being condemned to a strictly ritualistic representation of their gods, that the feeling for the higher forms of sculpture has been destroyed in them. How completely their figure sculpture fails in true art is seen at once when they attempt to produce it on a natural or heroic scale; and it is only because their ivory and clay and stone figures of men and animals are on so minute a scale that they excite admiration. Their larger figure sculpture is indeed never pleasing, except when treated conventionally. It is a strange failing.

Lac Work.

Lac work is a great and widely-extended industry in India. The shell lac itself is manufactured on a large scale in many parts of Bengal. There is a lac manufacture at Elambazaar in Beerbhum in the Bardwan division; and there are several factories in the Lohardugga district of Chota-Nagpur and along the banks of the Parulia, between Jhalda and Ranchi in the Manbhum district of the same division. Large quantities of stick lac are also drawn from Chota-Nagpur, and from Raipur and Sambalpur in the Central Provinces. The higher class of lac work, applied to furniture and house decorations, is centred in the great towns; but the making of variegated lac marbles, and lacquered walking sticks, lac mats, and bangles and lacquered toys is carried on almost everywhere, even by the wandering jungle tribes. The variegated balls and sticks are made by twisting variously colored melted sealing-wax round and round the stick or ball from top to bottom in alternate bands. Then the stick or ball

is held before the fire, and with a needle or pin short lines are every here and there drawn perpendicularly through the bands of sealing-wax, drawing the different colors into each other, when the stick or ball is rapidly rolled on a cool, smooth surface, and that intricately variegated effect is produced which is so puzzling until explained. The netted mats are made by allowing the thread of sealing wax twisted round a stick to cool, and then drawing off the whole coil, and breaking it into sections of three or four turns each, which are linked together into "mats" of all sorts of variegated colours, but chiefly scarlet and black, and black and golden yellow. I describe the process from actual observation.

Mr. Baden Powell has given a full description of the manufacture of lac bracelets and ornamental beads at Delhi and other places in the Panjab. To "silver" the lac bracelets tinfoil is mixed with half its weight of dry glue, and these are pounded together until, in about six hours' time, they amalgamate. The mass is then thrown into hot water, when it crumbles into little pieces. They then stir this up and pour off the water, repeating the operation until any dirt or impurity in the water entirely disappears. When the solution is quite pure, it is boiled, and then let to stand for the night. The next morning a silvery glue is found deposited, and this is spread with a brush on the lac, and burnished when dry by rubbing with a string of glass beads. The golden varnish is made by boiling myrrh, copal, and sweet-oil together and applying with a brush. The lac bracelets are often further ornamented, by having little glass beads and bits of tin or copper foil stuck along the edge.

Mr. H. A. Acworth has also minutely described the interesting manufacture of lac bracelets in the district of the Panch Mahals in Gujarat. He says it is the only industry of special interest at Dohad. The lac is collected by the Bhils in the neighbouring forests of Ali Rajpur, Udaipur, and Devgad Bariya and sold by

them to the Vania [Banyan] grain dealers, who again sell it to the town manufacturers of this work. As the bangles are separately formed they are slipped over the oily conical head of a rice pounder, which is about the size of a woman's forearm. When it is about half-covered with rings, they are all carefully heated, so that without melting they may stick to each other; this done the set of rings [25 go to the set], now forming a single bracelet, is rubbed with brick powder, and polished with copal varnish colored vermilion or blue or yellow. The next step is to print a pattern on the cylinder of bracelets. For this purpose two ounces of thin tin and a small lump of glue are pounded together all day until they form a dull grey metallic paste. Next day it is boiled in a copper vessel over a slow fire, and the solution strained through a coarse cloth, when it is ready for use. Meanwhile cottonwool is tightly wound round a small piece of bamboo, and so wetted and pressed that it becomes hard enough to have a pattern impressed on it with a large iron needle. This cotton stamp is now taken, dipped in the tin water, and being pressed on the cylinder of bracelets prints its pattern on them. Then once a day for three days a varnish is applied which turns all the white dots of the tin pattern into a beautiful golden colour. Lastly the pattern is completed by studding the bracelet with drops of tin water made red with vermilion, or white with chalk. These bracelets are sold for less than a half-penny each. They are formed in imitation of the ivory bracelets of Ratlam, and are worn by the Vania women throughout Malwa, and by the Dohad ladies of the Rajput caste. Beside bracelets, yellow and red striped armlets, called *golias*, worn between the elbow and shoulder, are made. The industry gives employment to nine families at Dohad, and six at Jhalod. Half of them are Mahomedans, and half Hindus. Lacquered wooden bracelets and wooden toys, and other lacquered turnery are made also at Ahmedabad and Surat in the Bombay Presidency, and in the Madras

Presidency at Channapatna in Mysore, and Harpanhalli in the Bellary district. Beautiful lac ornaments for women are made at Ellichpur in Berar; and by the wandering tribes about Lalatpur in the North-Western Provinces.

The lacquered wooden and *papier mâché* Indian boxes and trays, now being largely imported into England, are of several distinct kinds.

The *Sindh* boxes are made by laying variously colored lac in succession on the boxes while turning on the lathe, and then cutting the design through the different colours [Plate 64]. Other boxes are simply etched and painted with hunting scenes, or natural or conventional flowers, and varnished [Plate 65]. Plate 66 illustrates the style of lacquering usually applied in Sindh to the legs of bedsteads [*char-pai*].

The *Panjab* boxes are distinguished by the purple-colored lac used on them. They are made chiefly at Pak-Patan, and in the Derajat. The Panjab *papier mâché* articles are made at Mazaffarghar.

The *Rajputana* boxes have generally a drab ground, decorated with conventional, almost geometric, flower forms, of two colours, or two forms arranged in the alternate rhythmical manner which is seen throughout all Indian decoration.

The lacquered *papier mâché* work of *Cashmere* is the choicest in India, and inferior only to the very best Persian. It is chiefly used for native pen cases and boxes, which are painted all over either with the shawl [cone] pattern in many colours, a most unpleasing style of decoration for large objects, such as tables and chairs, or with the common flower forms of the Cashmere valley, the rose, narcissus, pink, and jasmine, painted in their natural forms and colours, but without light and shade.

In the North-Western Provinces *Bareilly* is celebrated for its black lacquered and gilt furniture, for which there is a considerable demand in Calcutta.

The lacquer work of *Karnul*, applied to large trays and boxes,

is embossed with flowers, painted generally on a green ground, and lighted up with gold [Plate 67].

The lacquer work of *Sawantwadi* is applied to native toys, such as models of hand-mills, weights and measures, cooking utensils, and vessels for eating and drinking, and to the peculiar fans of the country, and Hindu playing cards. These last are circular, and being painted with mythological subjects in bright colours, are most pleasing objects, and interesting also as illustrating the state of the art of painting in India, in districts where it has remained uninfluenced by European teaching and example.

In *Mysore*, and elsewhere in the Dakhan, there is a sort of lacquer-ware in which the ground is painted in transparent green on tinfoil, and the subjects, generally mythological, being painted on this shining background in the brightest opaque colours, the effect has almost the brilliancy of the jewelled enamels of Jeypur. Several examples of it are exhibited in the India Museum. One, a box, is painted on the two sides with all the guardians of the eight quarters of the world in procession:—Indra, Agni, Yama, and Nirritu on one side; and Varuna, Vayu or Pavana, Kuvera, and Isana on the other. At the two ends are scenes from Krishna's life, his hiding in a tree with the *gopis'* clothes at one end, and his triumph over the serpent Kaliya at the other. On the panel of the cover are Brahma and Saraswati, attended by Hanuman, the monkey king, and Jambavat, the king of the bears, in the centre, and Siva and Krishna and Vishnu and their wives, on either side of them: while round the rim of the cover runs the perpetual sport of Krishna with the *gopis*.

Delhi Paintings.

The Ajanta Cave frescoes, and those of the caves of Bagh in Malwa, are a sufficient proof of the ancient aptitude of the natives of India for painting. They are quite equal in merit to the paintings of the same age in Europe, and have a strange resemblance in many ways to the almost contemporary frescoes of the catacombs at Rome. Mr. J. L. Kipling, in the articles which he has contributed to the *Lahore Guide*, 1876, refers with the highest approbation to the fresco painting on the walls of the Mosque of Wazir Khan in that city :—"This work, which is very freely painted and good in style, is true fresco painting, the *buono fresco* of the Italians, and like the inlaid ceramic work, is now no longer practised, modern native decoration being usually *fresco secco*, or mere distemper painting. The reason of this is that there has been no demand for this kind of work for many years. Though the builder was a native of the Panjab, the style is more Perso-Mogol, and less Indian than that of any other building in this city."

Pictorial painting of a rude kind is practised everywhere in India, and is produced in extraordinary quantities on the occasion of the annual festivals of the different gods. The paintings on talc sold at Patna, Benares, and Tanjore are often seen in this country. But the best, and widest known of all are the Delhi paintings on ivory, in the style of European miniatures, already mentioned under jewelry. They are often of great merit. The first Delhi painter of my time in Bombay was Zulfikar Ali Khan, on whose work I officially reported in 1863, and who I find from Captain Cole's admirable *Catalogue of the Objects of Indian Art formerly exhibited at South Kensington Museum*, sent the best Indian miniatures to the Annual International Exhibitions of 1871 and 1872. Mr. Baden Powell

mentions the names of Ismail Khan and Ghulam Husain Khan as the best miniature painters of Delhi at the time he wrote, 1872.

Mica is worked in the north of Khurruckdiha in Chota Nagpur, and exported both to Calcutta and Bihar in large quantity, both for painting and for the ornamentation of the beautiful *tazzias*, or *tabuts*, the models of the tombs of Hasan and Husain at Kerbela, which are borne in the annual procession of the Moharram by the Shiah Mahommedans of India.

Miscellaneous Small Wares.

Trinketry.—In all parts of India imitation jewelry and other trinketry, already referred to under ivory carving, lac work, &c., are made. In Dacca, bracelets are also made from chank shells, imported from the Maldivé and Laccadive islands. They are sawn into semicircular pieces which are joined together, and carved and inlaid with a red composition. The manufacture of shell bracelets in Sylhet gives employment to a large number of people. At Poona and other places bracelets and necklaces and chains are made of some sort of perfumed composition, and also of various seeds, as the scarlet and black seeds of the *ganja* or *gunch* [*Abrus precatorius*], the flat black seeds of the *talapota* or *turwar* [*Cassia auriculata*], the red seeds of the *rukta chandan* or red saunders [*Adenanthera Pavonina*], the mottled seed of the *supari* or betel-nut palm [*Areca Catechu*], the oval seeds of the *bhirli mar* [*Caryota urens*], and the deeply sulcated seeds of the *rudraksh* [*Elæocarpus Ganitrus*], which are also worn as a necklace by the Saivas and Mahommedan *fakirs*.

The manufacture of mock ornaments for the idols is a very prosperous industry in most large Indian cities. These ornaments

are for the most part made of paper, cut into various shapes and stuck over with bits of many-colored tinfoil, peacock's feathers, &c. Ahmedabad is specially mentioned by Mr. F. S. P. Lely in the *Bombay Gazetteer*, 1879, as celebrated for this manufacture. There the great occasion for the sale of these ornaments is the birthday of Krishna. The rich will sometimes spend as much as 25% in decking out a single image of the god with this paper trinketry, which perishes as used. Another article much in demand on that day is enamel: and among the chief enamelled articles sold everywhere in India are eyes for the gods, made of almond-shaped pieces of silver, enamelled white with a black pupil.

Feathers.—At Poona, peacock's feathers are made up with cuscus grass [*Andropogon Calamus-Aromaticus*], green beetle's wings, and spangles, into fragrant and very showy fans and mats.

Leather.—Curious toys, figures, and artificial flowers are made by a single family of the shoemaker [*muchi*] caste at Nursapur in the Godavari district. They are very like those made at Condapilli in the Kistna district.

In India shoes are valued not so much for the soundness of their leather as the beauty of their ornamentation; and formerly a great industry in gold embroidered shoes flourished at Lucknow. They were in demand all over India, for the native kings of Oudh would not allow the shoemakers to use any but pure gold wire on them. But, when we annexed the kingdom, all such restrictions were removed, and the bazaars of Oudh were at once flooded with the pinchbeck embroidered shoes of Delhi, and the Lucknow shoemakers' occupation was swept away for ever by the besom of free trade.

Bengal ladies use a toilet box made of leather, and cloth, ornamented with shells, for holding their pomades, and the *kohl* with which they blacken their eyelids; and the little compressed cakes of cotton dyed with saffron and lac-dye, which they use for staining their hands and feet; and the red lead used by married

women for painting the forehead just where the hair is parted. It generally contains also the iron bracelet which married women always carry about with them to ensure long life to their husbands.

In the Panjab, at Sirsa, Simla, Kangra, and elsewhere, *huka* stands, water bottles, and other articles of household use are wrought of plain leather, ornamented with strips of green leather and bright brass mountings.

Ornamented slippers, and sword sheaths are made throughout Rajputana, and slippers for the Mahommedans at Shikarpur, in the North-Western Provinces. Green slippers are worn only by Shiahs, and not by Sunnis. Chanda and Brahmapuri have a great reputation in the Central Provinces for the manufacture of native slippers. The slippers made at Molkalmuru are also noted in Mysore. In the Bombay Presidency, Poona, and Rajapur in the Ratnageri collectorate, are specially named for this industry. In Gujarat beautifully embroidered leather mats are made. The leather shields of Ahmedabad have been mentioned under Arms.

It is indeed quite impossible to enumerate all the smaller village wares of India, although they are the most interesting of all, illustrating as they do the infinite variety in unity of the decorative art of India.

Leather work is a very ancient art in India. Bharata, during Rama's absence, places his brother's shoes on the vacant throne of Ayodhya, and daily worships them. Menu expresses great repugnance to any one stepping into another man's shoes, and forbids it.

Pith-work.—Artificial flowers, models of temples, &c., are made in many parts of India of the pith of *sola*, or *Æschynomene aspera*, of which also the "sun hats" worn by Europeans in India, and called "solar" *topis*, by a natural corruption of the native name of the plant, are made. In Madras highly elaborate and accurate models of the great Dravidian temples of Southern India are made of this pith.

Bamboo work.—Very artistic bamboo work is made at Monghyr, in Bengal.

Palm-branch work.—Hand, and standard fans are made of the several species of palm leaves found in different parts of India. The broad and powerful fan formed of the branch of the *Borassus flabelliformis*, or palmyra, is often showily decorated with paint and gilding, and sometimes with embroidery.

Toys.—Indian toys are often very beautiful. The principal places of their production have been named under Lac work. Among the Prince of Wales' presents are two models of carriages, one drawn by cream-colored bullocks, and the other by cream-colored horses; both looking as if they had just stepped out of an illuminated page of the Ramayana or Mahabharata.

MUSICAL INSTRUMENTS.

INDIAN musical instruments are remarkable for the beauty and variety of their forms, which the ancient sculptures and paintings at Ajanta shew have remained unchanged for the last two thousand years. The harp, *chang*, is identical in shape with the Assyrian harp represented on the Nineveh sculptures, and the *vina* is of equal antiquity. The Hindus claim to have invented the fiddle bow. At Kalka, in the Ambala district of the Panjab, the "Jew's harp," *mu-chang* ["mouth-harp"], is made at certain seasons of festivity and sold by hundreds. Musical instruments are made in most of the large towns and cities, and those of Srinagar [Cashmere] and Delhi in the Panjab, of Murshedabad in Bengal, and of Tumkur in Mysore, are especially prized. They are also made of marked excellence at Parashram and Malwan, both in the Ratnagiri collectorate of the Bombay Presidency. Delhi, Bareilly, and Channapatna in Mysore are noted for the manufacture of wire for musical instruments. The conch shell used in India as a wind instrument is often beautifully mounted in silver and gold. It is the *Turbinella rapa* of naturalists, and all that is required to make it sonorous is to drill a hole through its base. When blown into, the wind passing through the different whorls, produces a loud, sharp, and piercing sound, which is heard far and wide, and hence its great esteem as a war trumpet. It is used in religious services to call the attention of the gods to their worshippers; and also at the conclusion of certain ceremonies. The conch shell used for pouring water on the gods is a smaller one, the *Mazza rapa* of naturalists. Both these species, and a third, the *Voluta gravis*, are used in the manufacture of the shell bracelets of Dacca.

WOVEN STUFFS, LACE, FINE NEEDLEWORK, CARPETS, FELTS,
AND FURS.

ITS marvellously woven tissues and sumptuously inwrought apparel have been the immemorial glories of India. India was probably the first of all countries that perfected weaving, and the art of its gold brocades and filmy muslins, "comely as the curtains of Solomon," is even older than the Code of Manu. Weaving is frequently alluded to in the Vedas. Ushas is the daughter of Heaven, "clothed with radiance." In the hymn in which Trita prays to be released from the well in which he is confined he says, "Cares consume me as a rat gnaws a weaver's thread." In the hymn to Apris occurs the line:—"Day and Night spread light and darkness over the extended earth like two famous female weavers weaving a garment." The Yajur Veda mentions gold cloth, or brocade, for a counterpane. No information is given in the Rig Veda of the materials of which clothes are made; but in the time of the Ramayana and Mahabharata, cotton, silken, and woollen stuffs are constantly mentioned. In the Ramayana the nuptial presents to Sita, the bride of Rama, from her father, consisted of woollen stuffs, furs, precious stones, fine silken vestments of divers colours, and princely ornaments, and sumptuous carriages. The Ramayana gives no names of places where particular articles of clothing were made; but in the Mahabharata, in the enumeration of the presents which the feudatory princes brought to Yudhisthira, as their Lord Paramount, mention is made of furs from the Hindu-Kush, of woollen shawls of the Abhiras from Gujarat, and of clothes of the wool of sheep and goats, and of thread spun by worms, and of plant fibre [*hemp*], woven by the tribes of the North-Western Himalayas; of elephant housings presented by

the princes of Eastern Hindustan ; and of pure linen [*muslin*], the gift of the people of Gangam, the Carnatic and Mysore. Weaving and dyeing are continually mentioned in the Code of Manu ; and in other ancient works black cloth is appropriated to the Indian Saturn, yellow to Venus, and red to Mars. In the ancient sculptures the women are represented both in richly embroidered brocaded robes, and in muslin so fine as to fully expose their form, the lines of its folds, or of its silk and gold edging, traced across their bodies, being the only evidence that they are clothed. On the Ajanta Cave paintings the women's robes are blue, which still is a favorite colour with Indian women. The Hindu poets are very eloquent on the charming effect of a fair [sienna complexioned] woman dressed in blue, likening it to that of a dark cloud lighted up by the radiant fire of beauty. It is, however, considered indecent for a woman of the twice-born castes to wear a blue dress unless it be of silk, excepting in the case of a Brahmini woman at night, a Kshatriya woman while a bride, or at a feast, and a Vaisya woman when performing *sraddha*. But they all take off any blue cotton dress they may be wearing during meals. One of the most ancient epithets of Vishnu is *pitambara*, "clothed in yellow garments." The Indian hermits, in the oldest mention of them, are required to wear clothes of yellow ochre colour, all others being free to wear any colour of vesture they please. When the Greeks with Alexander arrived in India, they noticed that the garments worn by the people were made of "tree wool," or "wool produced in nuts;" and Megasthenes [Strabo, xv, 1, 53-56 and 69], adds, "their robes are worked in gold, and ornamented with various stones, and they wear also flowered garments of the finest muslin." No conventional ornament is probably more ancient than the colored stripes and patterns we find on Indian cotton cloths, and the cotton carpets called *satrangis*. In the *kincobs*, or silk brocades, the ornamental designs betray conflicting influences. It is very difficult to say when silk weaving passed from China into

India, and it would appear as if there were no conclusive evidence of its having been known in Western Asia until Justinian introduced it in the sixth century through Persia from China. But there is no doubt that the brocades of Ahmedabad and Benares and Murshedabad represent the rich stuffs of Babylon, wrought, as we know they were, with figures of animals in gold and variegated colours. Such brocades are now a speciality of Benares, where they are known under the name of *shikargah*, happy "hunting grounds," which is nearly a translation [Yule, *Marco Polo*, i, 63] of the name *thard-wahsh*, or "beast hunts," by which they were known to the Saracens. Fine weaving probably passed from India to Assyria and Egypt, and through the Phœnicians into Southern Europe; and gold was inwoven with cotton in India, Egypt, Chaldæa, Assyria, Babylonia, and Phœnicia, from the earliest times, first in flat strips, and then in wire, or twisted round thread, and the most ancient form of its use is still practised all over India. In Exodus xxxix, 2 and 3, we read: "And he [Aholiab] made the ephod of gold, blue and purple and scarlet, and fine twined linen. And they did beat the gold into thin plates, and cut it into wires" ["strips" it should be translated], "to work it in the blue and in the purple and in the scarlet, and in the fine linen, with cunning work." The inspired Psalmist, in setting forth the majesty and grace of the Kingdom of God [Psalm xlv], says, "Upon thy right hand did stand the Queen of Ophir. . . . The king's daughter is all glorious within, her raiment is of wrought gold." Almost at the same time Homer describes the golden net of Hephæstus [*Od.* viii, 274]:

"Whose texture e'en the search of gods deceives,
Fine as the filmy webs the spider weaves."

Pliny [Bk. viii, ch. 74] also tells us, "But to weave cloth with gold was the invention of an Asiatic King, Attalus, from whom the name Attalic ["*Attalica vestis*," "*Attalica tunica*," "*Attalicus*

torus" was derived, and the Babylonians were most noted for their skill in weaving cloths of various colours. Of course the excellence of the art passed in the long course of ages from one place to another, and Babylon, Tarsus, Alexandria, Baghdad, Damascus, Antioch, Tabriz, Constantinople, Cyprus, Sicily, Tripoli successively became celebrated for their gold and silver, wrought tissues, and silks and brocades. The Saracens, through their wide-spreading conquests and all-devouring cosmopolitan appetite for arts and learning—at second-hand—succeeded in confusing all local styles together, so that now it is often difficult to distinguish between European and Eastern influences in the designs of an Indian brocade: and yet through every disguise it is not impossible to infer the essential identity of the brocades of modern India with the blue and purple and scarlet worked in gold of ancient Babylon.

Such brocades doubtless were "the goodly Babylonish garment" which tempted Achan in Jericho, and the Veil of the Temple at Jerusalem, which Josephus describes "as a πέπλος Βαβυλώνιος of varied colours marvellously wrought." Col. Yule [*Marco Polo*, i, 62], in the place just cited, also writes: "From Baudas, or Baldac, *i.e.*, Baghdad, certain of these rich silk and gold brocades were called *Baldachini*, or in English, Baudekins. From their use in the state canopies and umbrellas of Italian dignitaries, the word Baldacchino has come to mean a canopy, even when architectural." Cramoisy derives its name from the Kermes insect, which before the introduction of cochineal from America, in 1518, was universally used for dyeing scarlet. It is the *tola* of Moses, wherewith the hangings of the Tabernacle and sacred vestments of the Hebrew priesthood were "twice dyed." Sardis was celebrated for this scarlet dye, as were Tyre and Crete for their resplendent purples, the Tyrian having been obtained from a shell-fish, as was also the red of Tarentum, and the Cretan tincture from a plant which Theophrastus, Dioscorides, and Pliny respectively call τὸ πόντιον φῦκος, φῦκος θαλάσσιον, *rhycos*

thalassion, but which was, however, not a seaweed, but a lichen, identical probably with one of the species from which the Orchil purple of modern art is prepared. That the celebrated "purple" of the ancients was amethystine or violet in hue, and not red, is directly proved by their comparing the Tyrian with the Cretan purple, the latter of which they considered the more brilliant. Herodotus tells us of the admiration of Darius for the "scarlet cloak" [Rawlinson, *χλανὶς πυρρὰ*—"amiculum rutilum" Latin translation] of Syloson, the Samian, the fiery colour of which was probably derived from Kermes, and which certainly would not have excited the cupidity of Darius had the dye of Tyre been red. From the Arabic names of the insect, *kirmij*, comes not only *cramoisy* and *carmine*, but also *vermeil*, *vermilion*. The Arabs received both the insect and its name from Armenia, and *kirmij* is derived from *quer mes*, and means originally "oak berry." Dioscorides describes it under the name of *κόκκος βαφικῆς*. Pliny says of it, "est autem genus ex eo in Attica fere et Asia [Proconsulari] nascens, celerrime in vermiculum se mutans, quod ideo solecion vocant" [xxiv, 4]. *Vermilion* is the same word as *vermiculum*. *Vermiculum*, in fact, in the middle ages, signified Kermes, "and on that account cloth dyed with them was called vermiculata," and in England formerly "vermilions." The French term *vermilion* also originally signified Kermes, and from it was subsequently transferred to red sulphuret of mercury or cinnabar, a pigment known from the earliest times, it being mentioned by Jeremiah in his description of a house "ceiled with cedar and painted with vermilion" [ch. xxii, 14]; and by Ezekiel [xxiii, 14], when referring to the carvings of "men portrayed upon the wall, the images of the Chaldæans portrayed with vermilion," which portraiture in carving and in paint have survived to our time.

Textile fabrics frequently take their names from the place where they first acquired excellence, and retain them long after the local manufacture has been transferred elsewhere, and sometimes

the name itself is transferred to an altogether different style of manufacture. Thus, beside Baudekin from Baghdad, we have Damask from Damascus, and Satin from Zaytoun in China [Yule]. Sindon, Syndon, Sendal, Sandalin, and Cendatus, from Sindh, Calico from Calicut, and Muslin from Mosul. Marco Polo, Book I, ch. v, writes of the kingdom of Mosul, "All the cloths of gold and silver that are called *Mosolins* are made in this country; and those great merchants called *Mosolins* who carry for sale such quantities of spicery and pearls, and cloths of silk and gold, are also from this kingdom." In his note [vol. i, p. 59] Colonel Yule observes: "We see here that *mosolin* or muslin has a very different meaning from what it has now. A quotation from Ives, by Marsden, shews it to have been applied in the middle ages to a strong cotton cloth made at Mosul. Dozy says that the Arabs use *Maucilli* in the sense of muslin." Tartariums, Colonel Yule [*Marco Polo*, i, 259] believes, were so-called, "not because they were made in Tartary, but because they were brought from China through the Tartar dominions." Dante alludes to the supposed skill of Turks and Tartars in weaving gorgeous stuffs; and Boccaccio, commenting thereon, says that Tartarian cloths are so skilfully woven that no painter with his brush could equal them. Thus also Chaucer, as quoted by Colonel Yule:

"On every trumpe, hanging a broad banere
Of fine *Tartarium*."

This is the cloth of gold which Marco Polo calls *Nasich* and *Naques*, and he evidently describes the primitive working of gold in strips into it where, Book II, ch. xiv, he writes: "Now on his birthday, the Great Khan dresses in the best of his robes, all wrought in beaten gold." Buckram is said to be derived from Bokhara. The word occurs [Yule, *Marco Polo*, i, 59] as *Bochorani*, *Bucherani*, and *Boccassini*. Fustian is said to be derived from Fostat, one of the mediæval cities that form Cairo, and Taffeta

and Tabby from a street in Baghdad. Baden Powell, however, in his list of cotton fabrics met with in the Punjab [*Punjab Manufactures*, vol. ii, p. 22], names *taftá* a fabric of twisted thread, made both in silk and cotton; and *tafta* in Persian means twisted, as *bafta* means woven. Perhaps the manufacture gave its name to the street in Baghdad where it was made. Cambric is from Cambray; Sarcenet from the Saracens; Moire and Mohair from the Moors. Diaper is not, however, from d'Ypres in Flanders, but from a Low Greek word *διασπών* (from *διασπᾶω*, I separate), meaning "patterned," figured, diapered. Arras is from Arras; Dowlas—"filthy dowlas"—from Dowlais in France; Holland, "of eight shillings an ell," from Holland; and Nankeen from Nankin. Gauze is said to be from Gaza, Baize from Baizé, and Dimity from Damietta. Cypresse is from Cyprus; and Frieze from Friesland; Jean from Jaen; Cloth of Rayne from Rennes; and Cloth of Tars from Tarsus, or perhaps Tabriz. Drugget is said to be from Drogheda; Duck, that is Tuck [whence Tucker Street, Bristol], from Torques in Normandy. Bourde de Elisandre or Bourdalisandre from Alexandria; Worsted from Worsted in Norfolk; and Kerseymere ["Cashmere"] from Kersey, and Linsey-Wolsey from Linsey, two villages of Sussex. Gingham is said to be from Guingamp; Siclatoun is thought to be from Sicily. Chintz is derived from *chint* or *chete*, Hindu words for variegated, spotted, whence *chita*. Velvet and Samit are both fabrics of Eastern origin, and the etymology of the former word, in old English "velouette," is from the Italian *vellute*, fleecy, nappy, and Latin *vellus* a fleece; and of the latter, from *ἕξ* "six," and *μέτροι* "threads," the number of threads in the warp of the texture. Camlet was originally probably woven of camels' hair. Under the Eastern Empire *Chrysoclavus* was the name given to old silks of rich dyes worked with the round nail head pattern in gold. The name *Gammodion* was given to silks patterned with the Greek letter Γ; and when four of these letters were so placed as to form a

St. George's cross, or a *Filfot* [*swastika*, i.e. "auspicious"] cross, the silk was termed *Stauron*, or *Stauracinus*, and *Polystauron*. *De fundato* were silks covered with a netted pattern in gold; and *Stragulata* were stiped on barred silks, evidently derived originally from India. Tissue is cloth of gold or silver, similar to Siclatoun and Tartarium or *Naques* [a word corrupted, I believe, from the Hindi, *naksha*, a picture], and the *soneri* and *ruperi* of India; and the flimsy paper called tissue-paper was originally made to place between the tissue to prevent its fraying or tarnishing when folded. Cloth of Pall would be any brocade used as an ensign, robe, or covering-pall of state, and generally means Baudekin. *Camoca* is the same word as *kincob* [*kimkhwa*]. Shawl is the Sanscrit *sala*, a floor, or room, because shawls were first used as carpets, hangings, and coverlets. The word therefore is in its origin the same as the French *salle* and the Italian *salone*, saloon or large room. The name *Bandana* pocket handkerchiefs is derived from the Indian word *bhandu* applied to stuffs from the method, to be hereinafter described, by which they are printed in spots.

Cottons.

Cotton manufacture did not obtain a real footing in Europe until last century. At a date before history the art was carried from India to Assyria and Egypt; but it was not until the thirteenth century that the cotton plant was introduced into Southern Europe where its wool was at first used to make paper. The manufacture of it into cloth in imitation of the fabrics of Egypt and India was first attempted by the Italian States in the thirteenth century; from which it was carried into the Low Countries, and thence passed over to England in the seventeenth century. In 1641 "Manchester cottons," made up in imitation of Indian cottons, were still made of wool. But in vain did Manchester attempt to compete on fair free-trade principles with the printed calicoes of India; and gradually Indian chintzes became so generally worn in England, to the detriment

of the woollen and flaxen manufactures of the country, as to excite popular feeling against them; and the Government, yielding to the clamour, passed the law, in 1721, which disgraced the statute book for a generation, prohibiting the wear of all printed calicoes whatever. It was modified in 1736 so far that calicoes were allowed to be worn, "provided the warp thereof was entirely of linen yarn." Previously to this, in 1700, a law had been passed by which all wrought silks, mixed stuffs, and figured calicoes, "the manufacture of Persia, China, or the East Indies, were forbidden to be worn or otherwise used in Great Britain." It was particularly designed for the protection of the Spitalfields silk manufacture, but proved of little or no avail against the prodigious importation and tempting cheapness of Indian piece-goods at that time. Cotton was first manufactured in Scotland in 1676, and in Glasgow in 1738, and in Manchester the manufacture of printed calicoes was regularly established in 1765. Fustians, dimities, and vermilions from cotton-wool had, however, been made in London and in Manchester from 1641. After the invention of Arkwright's machine, in 1769, the production of Manchester developed so rapidly as to make it very evident that the protection of manufactures against foreign competition was a violation of the first principles of political economy.

The word "cotton" is not used in the English translation of the Bible, but in the passage of the book of Esther, [*circa* B.C. 450] ch. i, 6:—"Where were white, *green*, and blue hangings,"—the Hebrew word translated "*green*," is *karpas*, the Sanscrit *karpasa*, and Hindu *kapas*, that is, cotton [in the pod], an aboriginal Indian production. The passage should be translated—"Where were white and blue [striped] cotton hangings;" which were probably imitations from, if not actually, Bengal *satrangis*. The Ramayana frequently mentions colored garments, and the way in which robes are represented colored on the Egyptian monuments in zig-zag stripes of different colours, green, yellow, blue, pink, is one of the most characteristic ways of dyeing cotton cloths in

India. Herodotus, Book i, ch. 203, tells of a certain tribe of the Caspian :—" In these forests certain trees are said to grow, from the leaves of which, pounded and mixed with water, the inhabitants make a dye, wherewith they paint upon their clothes the figures of animals, and the figures so impressed never wash out, but last as though they had been inwoven in the cloth from the first, and wear as long as the garment." Pliny, Book xxxv, ch. 42 (11), writes : " In Egypt they employ a very remarkable process for the coloring of tissues. After pressing the material, which is white at first, they saturate it, not with colours, but with mordants that are calculated to absorb colour. This done, the tissues, still unchanged in appearance, are plunged into a cauldron of boiling dye, and are removed the next morning fully colored. It is a singular fact, too, that, although the dye in the pan is of a uniform color, the material when taken out of it is of various colours, according to the nature of the mordants that have been respectively applied to it ; these colours, too, will never wash out."

From Arrian we have seen that *σινδόνες*, muslins ; and *ῥθόνια*, cottons ; *περιζώματα*, sashes, *ζῶναι σκιωτάι*, sashes striped with different colours ; *πορφύραι*, purple cloth ; and *σινδόνες μολόχιναι*, muslins of the colour of mallows, were exported in his time from India to all the ports on the Arabian and East African coasts. The Portuguese gave the name of *pintadoes* to the chintzes of India when they first saw them at Calicut. Indeed the cotton tissues and stuffs of India have always been even more sought after for the beauty and brilliance of their natural dyes, than for the fineness and softness with which they are woven ; and one of the greatest improvements in English textile manufactures would be the substitution of the rich deep-toned Indian dyes for the harsh flaring chemicals, especially of the magenta series at present in use. Mr. Wardle, of Leek, has paid great attention to this matter, especially in connexion with the application of dyes to the *tasar* silk of India.

The Maharaja of Cashmere has, it is said, adopted an effectual plan for the suppression of the magenta dyes within his kingdom. First, a duty of 45 per cent. is levied on them at the frontier; and at a certain distance within the frontier, they are confiscated and at once destroyed.

The great export trade in Indian cotton manufactures has long fallen before the competition of Manchester. Still, however, an immense cotton manufacture, for domestic purposes, continues to exist in India, equal probably to the whole export trade of Manchester; and now that cotton mills are being established in Bombay and other cities, we may even expect to see the tide of competition at last turned against Manchester. In consequence of the improvement of national taste in this country, and the spread of higher education and culture among the natives of India, we may hope for a rapid increase in the demand for Indian hand-loom made and artistically dyed and printed piece goods. The true *couleur d'ivoire* is found naturally only in Indian cotton stuffs. Nothing could be more distinguished for the ball-room, nothing simpler for a cottage, than these cloths of unbleached cotton, with their exquisitely ornamented narrow borders in red, blue, or green silk. Indian native gentlemen and ladies should make it a point of culture never to wear any clothing or ornaments but of native manufacture and strictly native design, constantly purified by comparison with the best examples, and the models furnished by the sculptures of Amravati, Sanchi, and Bharhut.

The Principal Places of Cotton Manufacture in India.

The Panjab.—Mr. Baden Powell says that it is impossible to exclude any city or town from the list of cotton manufacturing localities in the Panjab. Weavers are found in every place producing at least the coarser cloths required by all classes. In the large cities, such as Lahore, Amritsar, Multan, Ludhiana, and others, almost every kind of fabric is woven. Ludhiana has a special name for drills, checks and other cloths resembling

European denominations ; as well as for *lungis* [head and waist-cloths], and other native fabrics. Multan is noted for cotton pile carpets, and printed and hand-painted calicoes or chintzes, and native *dhotis* [waist-cloths] with a red printed border. But the most important seat of all the finer cotton weaving is the Jalandhar Doab, comprising the districts of Hushiarpur, Jalandhar, and Kangra, between the Satlaj and the Bias. Here, as everywhere throughout India, the competition of Manchester has caused fatal injury to the local manufacture, but still the fine *gatis* [diapers] of Rahun, and the muslin turbans of Bajwara are celebrated even in Hindustan. A coarse cloth called *khada* [which literally means "woven"] is also largely exported from the Doab to the hills beyond Kulu and Spiti. In other parts of the Panjab there is an equal demand for this cloth for the markets of Cabul and Turkestan, and other towns through which the Paracha merchants pass between Bengal and Central Asia. In this way the districts of Jhang, in the Retchna Doab, between the Ravi and Chenab, and of Shahpur, especially the town of Kushab, in the Jetch Doab, between the Chenab and Jhilam, have a considerable trade in *khada* ; and chintzes and printed fabrics are also much in demand and are largely exported. Multan, which is a great rendezvous of the Povinda merchants of the new frontier district of the Panjab, has a considerable trade in them, as indeed in all the articles that are exported from India into Central Asia. The district of Gugaira, and especially the towns of Syadwalla and Pak-Pattan, in the Derajat, between the Indus and Suleiman hills, are noted for the weaving of *lunghis*, and *khesis* [wrappers or robes]. Kushab in Shapur is also noted for its *lungis* both silk and cotton. The *lungis* of Peshawar are famous, and the dark blue scarf with its crimson edge, woven in the valley of Kohat, south of Peshawar, is, observes Mr. Baden Powell, very characteristic. A similar scarf, both plain and ornamented with a gold border, is woven, in the Hazara hills north of Rawul Pindi. It is estimated that from 5,000 to

6,000 of the plain kind, valued at from four to thirty shillings each are made yearly; and from 1,500 to 2,000 of the bordered kind, valued at from 1*l.* to 7*l.* each. The Panjab districts bordering on the North-Western Provinces and Rajputana are principally remarkable for muslin turbands, which are largely woven at Delhi. In the Sirsa district the principal fabrics are two coarse sorts of muslin called *gazis* ["rough"], *painsis* ["broad," 500 threads to the weft], and *dabba khesis*, that is "wrappers" of two colours. Other Panjab denominations,—which are common to all India,—of native cotton fabrics, are *malmals* or muslins, of which *dorias* are striped of a thicker texture at regular intervals, and *dhotars* are a coarser variety; *dotahis*, sheets folded twice, and *chautahis*, sheets folded four times; and *susis*, fine-colored cloths, made chiefly at Battala and Sialkote, striped in the direction of the warp with silk, or cotton lines of a different colour, the cloth being called *dokanni* if the stripe has two lines, if three *tinkanni*, and so on. *Daris* or twills, and the plain cloths called *dosuti*, *tinsuti*, *chausuti*, used principally for tent cloths and dusters, and *dabbis* or "gambroons" have been made only since the English occupation of the country. The thick *dari* carpets also, for which Ambala was always famous, are now produced all over the country. Printed cloths, if the pattern is continuous, are called *chail*, if composed of separate designs *chit* [chintz], and if dyed in spots, like the old bandana pocket-handkerchief, *bhandu*.

Sindh—In Sindh coarse cotton cloths called *dangaris* are manufactured in every village and town. Both colored silk and cotton cloths are made at Alahyar-jo-Tando; and *susis* at Hala. Tatta was once renowned for its silk and cotton fabrics, and a considerable manufacture of *susis*, *lungis*, and of mixed silk and cotton also, is still carried on there. Dr. Winchester [quoted by Mr. Hughes in the *Gazetteer of the Province of Sind*, London, 1876], in 1839, speaks of these articles being then made of exquisite beauty and workmanship; and they were greatly prized by the old Amirs, who included them in all the presents they

made to foreign powers. At that time the Tatta chintzes were considered to be far superior both in texture and pattern to those made in most other parts of India, and almost rivalled those of Surat. Cotton *lungis*, *susis*, and *saris* [robes] are also made in large numbers at Karachi.

Rajputana.—In Rajputana cotton is woven everywhere, and the printed muslins and cotton cloths [chintzes] of Jaipur and Jodpur are prized all over Hindustan for the purity and brilliance of their dyes. The large cotton *daris* of Rajputana, striped in red, green, yellow, blue, and black are marvellous examples of the skill of Indian weavers in harmonising the most prismatic colours.

North-Western Provinces.—In the North-Western Provinces a coarse cotton cloth, *kharua*, is generally made, and of especial excellence at Jhansi. In the Jalaun district a sort of muslin [*malma*] called *jagi* is made. The old town of Chandari in the Lalatpur district was famous for its fine muslins, but the trade has greatly declined. Captain Tyler tried to revive it, but in an outbreak of cholera in 1865 the weavers all died, or ran away, and his plans failed. In Saharanpur, a coarse cloth called *gara* is made. Turbans are a speciality of Sikandrabad. Dyeing and printing of country cloths is carried on in many places. The muslins of Benares are figured with gold on a ground of white, black, brown, or purple. The city of Bijnur has a special reputation for the manufacture of the sacred cord or sacrificial thread [*senaar*, *janeo*] of the Brahmans.

Oudh.—In Oudh, before its annexation, a large number of the lower classes were employed in weaving cotton, and their looms paid a fixed annual duty to the King, but the industry received a deadly blow directly it was exposed to the unrestricted competition of Manchester. Yet every village has still its little colony of caste weavers. Take for example the Nawabganj tahsil, in the district of Bara-Banki, of which the statistics of the local manufacture are given in the official *Gazetteer* [Lucknow, 1877]. It supports 1,910 weavers, who weave ten denominations of cotton fabrics, namely, *garas*, *gasis*, *dhotis*, *mamudis*, and *kasas* of country

twist, and *tapatis*, *charkanas*, *adotars*, *susis*, and *bilras* of Lancashire twist. In the Hardoi district the muslin called *mamudi* is still in considerable demand, and weaving also thrives at Tanda, Nawabganj, Baiswara, and cotton printing at Kheri, all in the same district. In the Kheri district [quite distinct from the town before named] the largest in Oudh, cotton weaving is pursued by 3,155 and cotton printing by 990 artificers. At Biswari, in the Sitapur district, there are 100 families of weavers, and no emigration of distressed weavers has yet taken place from this district. At Jais, in the Sultanpur district, various kinds of textile cloths, both plain and brocaded, are manufactured, of which a peculiar kind of muslin called *tanzib* is the most famous. The weavers have a curious art of in-weaving with it, at the time of its manufacture, any design that may be suggested to them. Verses and sentences are most common, and these are varied to suit every taste and creed. Some are passages from the Koran, others from the Vedas, and others from Watts's moral songs and hymns. In the Lucknow district the weavers were at one time highly prosperous, but have now but small work for their looms. The number of looms is said to be 1,474, the number of pieces turned out 89,159, of the total yearly value of £15,347, or about £10 on each loom. Cotton printing, however, still continues to be a successful calling in the city of Lucknow, although Manchester chintzes sell for a shilling the yard, while those printed on the spot cost twenty pence the yard. But the Lucknow chintzes are far superior in colour, the Kukrail and Baita rivers being famous for the purity of the tints their waters give to the deep-toned dyes of India. Formerly the weavers of Tanda in the Fyzabad district used to produce the most delicate muslins, but now they are seldom made.

Bengal.—Cotton fabrics are manufactured all over Bihar, Bengal, Orissa, and Assam. Superior cotton cloth is made in the Satkirah subdivision of the twenty-four Pergunnas, and at several places in Bardwan. The fine cotton manufacture of

Santipur arose from its having been the centre of the large factories established in the Nuddea division, in the old days of the East India Company. At Charpata, also in Noakhali, in Chittagong, there was formerly a cotton factory of the old East India Company, and the *baftas* ["woven"—cotton stuffs] or "Bastas," for which it was famous, had, in their time, an extensive reputation and were largely manufactured. Coarse cloth only is now made there, and the importation of Manchester goods bids fair to destroy even this limited industry. In Chittagong the Mugs of Cox's Bazaar make both silk and cotton cloth. At Sarail, in Tipperah, a *tanzib*, or *tanjib* muslin is made as fine almost as the muslins of Dacca. Cotton weaving employs one-tenth of the population of Tipperah, but the industry is rapidly declining in the competition with Manchester, the native weavers taking to agriculture. At Jahanabad in the Patna division, the weaving of fine cotton stuffs, a relic of the East India Company's factory at Patna, is still carried on; and the weavers continue to form an important body of the community. Towels and bath cloths are a speciality of Bihar, and strong coarse cloth of Sarun. Good cotton cloth is also made at Palamow in Chota Nagpur. At Kassimbazaar, in the Rajshahye division, there has been a great decline in its once famous manufactures since the abolition of the East India Company's monopoly in 1833.

The once celebrated Dacca muslins are now almost a thing of the past. James Taylor, in his *Sketch of the Topography and Statistics of Dacca*, published in 1840, deplores the ruin which had overtaken its muslin trade: but he records that thirty-six different denominations of cotton cloth were still made at Dacca. Since Dr. Taylor wrote, the manufacture has still more greatly fallen off. In the time of Jehangir, Dacca muslin could be manufactured fifteen yards long and one broad, weighing only 900 grains, the price of which was 40*l*. Now the finest of the above size weighs 1,600 grains and is worth only 10*l*, and even such pieces are made only to order. The three pieces presented to the

Prince of Wales, and which were expressly prepared for him, were twenty yards long and one broad, and weighed 1,680 grains [three and a half ounces] each. Tavernier states that the ambassador of Shah Safy [A.D. 1628-1641], on his return from India, presented his master with a cocoa-nut, set with jewels, containing a muslin turband thirty yards in length, so exquisitely fine that it could scarcely be felt by the touch. A rare muslin was formerly produced in Dacca, which when laid wet on the grass became invisible: and because it thus became undistinguishable from the evening dew it was named *subhnam*, i.e. "the dew of evening." Another kind was called *ab-rawan*, or running water, because it became invisible in water. The demand for the old cotton flowered and sprigged muslins of Dacca in Europe has almost entirely fallen off, but there is a brisk and increasing demand for *tussur* embroidered muslins, denominated *kasidas*, throughout India, Persia, Arabia, Egypt, and Turkey.

Central Provinces.—In the Central Provinces cotton looms are found everywhere, and the gold-wrought cotton tissues, which seem like woven sunshine, and brocaded silks of Barhanpur, and the richly-embroidered apparel of Nagpur and Bhandara, are famous, and still hold their own against all competition, throughout Central India.

Barhanpur is, however, Mr. Grant informs us in the *Gazetteer for Central Provinces*, Nagpur, 1870, a declining city. The removal from it of the seat of the native government is one cause of this, and another is the return of peaceful times under our administration, which has induced many of the cultivators of the neighbouring lands who resided within the walls for protection, to move nearer to their fields. A third is the advent of the railway, which has destroyed the business of Barhanpur as the depot for the trade between Malwa and the Dakhan. Another, and the one usually adduced as the sole cause, is the falling-off of the demand for the richer fabrics of inwoven gold, for the production of which the city has always been famous, owing to the breaking

up of so many native Indian courts. It now contains 8,000 stone houses, and a population of 34,137, most of whom are dependent in one way or another on the wire-drawing and cloth-weaving industries of the place. At the census of 1866 the number of gold thread makers were:—

Wire-drawers	601
Wire-flatteners	411
"Kalabatun" [gold thread] spinners	412
Total	<u>1,434</u>

The number of weavers engaged in weaving was—

Silk-spinners	45
Cloth-dyers	457
"Kalabatun" [gold thread] weavers	381
Other weavers	<u>4,437</u>
Total	<u>5,320</u>

In the Bhandara district native cloth is made at Bhandara, Pauni, Sihora, Adar, and several other towns. The finest and best is manufactured at Pauni. This cloth is much prized by the higher class of natives, who sometimes pay 20*l.* for a turband, or *dopatta* [a twofold scarf]. The manufacturers of these cloths are said to have come originally from Burhanpur, and from Paithan on the Godavari, the old capital of Salivahana, A.D. 78. Red *saris*, with different coloured borders of silk and cotton, are made at Mohari and Andhalgaon. Bagri is noted for its stout and durable *kadi* cloth, and the town of Bhandara for its turbands. The commerce of this district has received a great impetus through the improvement of the road to Jubbulpur, and the opening of the Railway.

In Nagpur, cotton and silk cloths of all sorts of descriptions are produced in great abundance, from *dhotis*, valued at 50*l.* the pair, to the scanty *langutis* worn by the common coolies. The *pagris*, or turbands, are generally made of finely woven cotton cloth, with a broad fringe of gold. The *saris* and *dhotis* are generally of plain cotton, with a handsome silk border. The very best of

these are made at Nagpur and Umrer, but those made in the neighbouring towns of Khapa, Maunda, and Bhiwapur, are also of superior quality.

At Hoshungabad, the weaving trade flourished until the enormous demand for cotton wool in 1863-64 raised the price of the raw material beyond the weavers' means. All the cotton wool in the district was exported, and Manchester piece goods were at once imported, and they have held the market ever since. Many native looms have in consequence stopped and the local manufacture has partially succumbed.

At Chanda, coarse and fine cloths are made which are still exported to all parts of Western India, and formerly found their way to Arabia. The Telinga weavers turn out cloths of colored patterns in very good taste, and cotton thread of wonderful fineness is spun for export to other parts of India.

At Bustar, the outcast Mahars and Pariahs weave the narrow coarse cloths used as *langutis* by the Murias and other wild tribes.

Berar.—In Berar the stout cotton cloths called *kadis* and *dhotars* are made everywhere. Fair turband cloths are woven at Bolapur, in the Akola district; and at Ellichpur, turbands and other fine cloths for male and female apparel. Excellent cotton carpets are also made at Ellichpur and Akot, and Bolapur in the Akola district.

Bombay.—In the Presidency of Bombay, Surat suffered as much as any town in India from the extinction of the East India Company's trading monopoly in 1833. "A new era was opened to English commerce," writes the historian, heedless of the two centuries of manufacturing activity and prosperity, under the Company's fostering rule, which had preceded it in India. But within the last four or five years the cotton manufactures of Surat have shewn strong signs of revival, and the Hindu weavers have begun to make cloth of a new pattern, chiefly for bodices, which is largely exported to the Dakhan.

Baroach, also, under the East India Company, was a great

centre of cotton manufactures, from the stoutest canvas to the finest muslins; but the industry was ruined by the unrestrained Manchester imports, and of the thirty odd varieties of cloths enumerated in the factory diary for 1777, only six are made now.

The weaving of cotton cloth is still an important industry in the Ahmedabad collectorate. At Ranpur fine cloth is woven from English yarn, and finds a ready sale in the neighbourhood. At Dholka, from the same materials *sadis* [*i.e.*, *saris*, women's robes], are made, of much local repute for their strength and steadfastness of colour; and in the city of Ahmedabad the richer weavers make superior *dhotis*, *saris*, *dopattas*, and *chalotas* [small waist cloths], which are sold in all parts of Gujerat, and exported to Kandesh and Bombay. *Khadi* cloth, *chopals*, and *dhotis* are woven in every village. Mr. Lely says, that although a large section of these village craftsmen are seen to suffer from the competition of the machine looms, which are now springing up everywhere in centres of the cotton manufacturing districts of Western India, Ahmedabad has not allowed its old cloth industry to die out. It has now four steam factories, employing 2,013 hands, and paying in wages a yearly sum of about 20,000*l.*; but the class which has benefited most from these mills is not the caste of local weavers, but the Vaghri, who formerly supported themselves by begging. Now whole families of these outcasts take employment at the mills, and become well off. Calico printing is also a craft of some consequence in Ahmedabad.

In the Kaira collectorate, before the opening of these monster factories at Ahmedabad, cotton weaving was the most important industry of the district. Almost all the men and women, both in the towns and the villages, writes Mr. G. F. Sheppherd, in the *Bombay Gazetteer*, 1879, were formerly to some extent engaged in cotton spinning and weaving; and the cloth woven by them was largely exported to Ratlam and other parts of India, both for clothes and sacking. But of late years Bengal jute has to a large extent taken the place of the local manufacture

for packing, while the wearing apparel, which, from its greater strength and cheapness, had little to fear from the fraudulent competition of Manchester heavily-sized goods, has now to a great extent been undersold by the mechanical productiveness of the mills of Bombay and Ahmedabad, the profits of which are for the most part carried away out of the country by the English and other European merchants of Western India. In this way the native caste weavers suffer a direct loss, without compensation of any kind.

But at Kaira the river water is very pure, and most excellent for dyeing, and therefore its painted cloths at least keep up their good name; and besides a widespread home demand for them, they are exported to other places, even so far as Siam. Some of these printers are men of capital. May their tranquil river ever keep its natural pureness for them.

Printing in gold leaf and silver leaf on cotton cloth and silk is very common in Gujarat. The cloth is first stamped with a deeply-cut hand-block dipped in gum; and then a layer of gold or silver foil is laid on, and sharply rubbed into it. The rubbing takes away the foil from the surface of the cloth, except where it has been fastened by the gummed pattern. Then the foil is so thoroughly beaten into the cloth that it may be roughly used without giving way. This industry also continues in a thriving condition.

Another mode of decorating silk or cotton is by knotting [*bandhna*], which gave its name to the old bandana pocket-handkerchiefs. To knot the silk or cotton, the undyed cloth is sent to a draughtsman, or *chitarnar*, who divides the whole surface into one-inch squares. Then it goes to the knoter, or *bandnari*, generally a young girl, who picks up a little cloth at each corner of the squares, and ties it into a knot with packthread, the number and position of the knots being fixed by the pattern it is desired the cloth should take. After being thus knotted all over, the cloth is sent to the dyer, who dips it into the colour required for the ground of the pattern; after which the knots

are all untied, and shew in little squares [not in circles] of white, the centres of which are generally hand-painted in yellow. This is the simplest of the *bandhana* patterns. In the *phal-wadi*, or "flower-garden," many colours are used. First the parts that are to remain white are knotted and the cloth dipped in yellow: then some of the yellow is knotted, and the cloth is dyed scarlet. For the border some scarlet parts are tied, and the rest dyed purple.

In the north of Gujarat the favorite color is red, and in Kathiwar, red, combined with deep brown, and yellow. Blue and green in combination with red and yellow are more prevalent in the south of Gujarat, and in the Maratha country. The great distinction—as Mr. George Terry has pointed out in his very interesting chapter on "The Manufactures of Western India" in the *Bombay Administration Report* for 1872-73—between the Gujarat and Maratha races, is in the decoration of their cotton goods, the purely Maratha people seldom wearing printed cotton goods, while the inhabitants of Gujarat prefer them to all others. The only printed stuffs worn by the Marathas are ornamented with metal leaf. Their usual *saris* and *cholis* [bodices] are dyed in the thread, and are either made of cotton only or silk and cotton mixed. The decorations consist of borders handsomely wrought in silk, or silk and gold. Blue is the favorite color; but dark green and purple, and deep crimson, are common enough. Calico-printing is also done at Baroach.

In the collectorate of Nasik, the town of Yeola is famous for its native silk and cotton manufactures, and the finer kinds of cotton stuffs are made also in the town of Nasik; and at Ahmednagar, Sholapur, and Kandesh. Gulutgud, in the Kaladgi district of the Maratha country, is known for its *saris* and *cholis*. Cotton-spinning and weaving are the commonest occupations in the Belgaum collectorate, particularly in the *talukas* of Parasgad and Sampgaum, Gokak, Chikodi, and Bidi. The total number of weavers Mr. Terry estimates at about 70,000. In the village of

Bil-Hongal in the Sampgaum *taluka*, *saris* are woven of great perfection. The towns of Margodi, Manoli, and Assundi, in Parasgad, also have a large population of dyers and cloth printers. But for the manufacture of cloths the palm must be given to Deshnur, in the northern part of Sampgaum. The town of Nandi-gad, in Bidi, is the great mart for cotton fabrics of all kinds which are imported from the eastern districts, and thence find their way to the coast country below the Ghâts.

Madras.—In the Godavari district in the Madras Presidency, most excellent cloths are made at Uppada, near Coconada, and in the villages about Utapalli and Nursapur; and the fine turbands made at Uppada are still in great requisition. Tent cloth of superior quality is also manufactured in the villages near Rajamandri, and in the Central Jail. The weavers are, however, in a very impoverished condition, as their industry has languished and gradually declined ever since the abolition of the exclusive trade of the East India Company.

Formerly there was a large manufacture of blue *salampores* at Nellore, which was quite broken up by the West Indian Emancipation Act, for the freed negroes refused, very naturally, to wear the garb of their slavery; and the heavy expenses of land carriage, the absence of railways and canals, and the risks of sending goods down to Madras by sea in native craft uninsured, while no insurance office will accept the risks of the road, all operate against the revival of the old trade, and the development of the immense natural resources of Nellore as a manufacturing centre.

At Vizagapatam a strong cloth is made called *punjam*, that is, "120 threads" [literally 60], and the cloth is denominated 10, 12, 14, up to 40 *punjam*, according to the number of times 120 is contained in the total number of threads in the warp. Dyed blue at Madras, it is exported to Brazil, the Mediterranean, and to London for the West Indies. Imitation Scotch checks and plaids are also made for the large population of poor native Christians in the Madras Presidency.

The chintzes of Masulipatam have enjoyed a world-wide celebrity ever since the days of Arrian, and probably of the Mahabharata. They are prized for the freshness and permanency of their dyes, the colours being brighter after washing than before. There is still a great demand for them in Burma, the Straits, and Persian Gulf, but Manchester goods threaten to destroy also this immemorial industry of India. Nearly all the Masulipatam chintzes seen in England are copied from Persian designs of sprigs of flowers, and of the knop and flower, and tree of life patterns. Wherever the Mahommedan influence is carried in India the decorative symbols of the Aryan race are introduced. But at Masulipatam the Persian designs have been introduced through the trade with Persia, and probably by Persian colonists.

In Nellore fine shirtings are made at Kovur, and pocket-handkerchiefs, and, when ordered, muslins suitable for ladies' dresses. Exceedingly fine muslins are made at Yapallagunta, in the Udyagiri *taluka*; and strong tent-cloths at Kandukur. Fine cloths are made in the *talukas* of Gundur, Rapur, Nellore, and Kavali. Handkerchiefs are specially woven at Valaparla in the Ongole *taluk*, and curtain-cloths at Gundavaram, Turimula, and Nidimusali, in the Nellore *taluka*. Dyeing is done at several places in the Kundukur, Ongole, and Nellore *talukas*.

In the Bellary collectorate cotton is generally woven, and also cloths of cotton and silk. Cotton carpets of large size for houses and tents, and of a smaller size for the native troops, are made at Adoni, whence they are exported in large quantities to all parts of Southern India.

In Mysore cotton manufactures are established in every district. Very superior cloths are made at Molakalnuru, which are much prized in Mysore and at Bangalore. Striped cotton carpets, *daris* or *satrangis*, are made in the Kolar districts: also at Shikarapur, in the Shimoga district: and chintzes at Shimoga itself and Aimur. In the Tumkur district there are 3,763 cotton looms, and 34,801 cotton spinning-wheels. Black and white checks are

made at Chiknayakanhalli. White sheets are made at Chittledrag, and cotton goods of all sorts at Harihar.

The weavers and dyers of Bangalore, who formerly worked for the court of Seringapatam, still manufacture the printed cotton cloths which were always their specialty.

At Madura large quantities of the stained cloths for which it is celebrated are manufactured. They are very coarse, and printed in only two colors, red and black, with mythological subjects taken from the Ramayana and Mahabharata. They are made chiefly for the service of the temples, and are very rare to get, except by favor of the priests. Sometimes they are touched up in yellow by hand painting. The whole district is also noted for handsome turbans bordered with gold lace, made at Dindigal, and Madura itself.

Coarse cloth is woven all over Kurg. In the village of Sirangala are made the shawls and *kamarbands* [waist-cloths] worn in Kurg. A fine description of cloth is woven at Kodlipet.

Dr. Forbes Watson's Classification of the Textile Fabrics of India.

Dr. Forbes Watson, in his exhaustive work on *The Textile Manufactures and the Costumes of the People of India*, which embodies the results of the experience and research of a life-time, classes together the manufacturers in cotton, silk, and wool which are made up on the loom as garments, such as turban cloths, and the *dhoti*, a flowing cloth bound generally round the waist and legs. It is generally bordered with purple or red, blue or green, like the *toga prætexta* [limbo purpureo circumdata], and in Mysore the *dhoti* is called *togataru*. The *sari*, used by the women, is also loom-made, and is the undoubted *κάλυμμα* of Homer. Thus Thetis [*Il.* xxiv. 93, 94]—

"Veiled her head in sable shade,
Which flowing long her graceful person clad."

Kerchiefs, and waistbands [*kamarbands*], and sashes [*dopattas*],

are also loom-made. The principal garments made up by cutting and sewing are the bodice [*choli*] for women, who sometimes also wear a petticoat; and drawers [*pijama*, literally "leg-cloth" from Sanscrit *pada*, Hindi *pai*, foot, so books say; but possibly from the Sanscrit word identical with the Greek *πυγή*, e.g., in Venus Kallipygos], worn both by men and women; and the undress coat, *angarka*; and full-dress coat, *jama*, worn only by men; and caps which go by all sorts of names, such as *topi*, *taj*, and others.

Among piece goods the first place is given to Dacca muslin, *abrawan*, or "running water"; *bafthowa*, "woven air"; *subhanam*, "evening dew," all plain white webs, the poetic names of which convey to the reader a truer idea of their exquisite fineness and delicacy, and of the estimation in which they are held, than whole pages of literal description. These fine muslins are all classed under the generic term of *mulmul khas* or "king's muslins." Plain muslins are made not only at Dacca and Patna and other places in Bengal, but also at Hyderabad in the Dakhan, and at Cuddapah and Arni in Madras. Striped muslins, or *dorias*, are made at Dacca, Gwalior, Nagpur, Hyderabad, Arni, and other places. Checkered muslins, or *charkana*, are chiefly made at Dacca, Nagpur, Arni, and Nellore; and figured muslins, *jamdani*, at Dacca. Dr. Forbes Watson describes them as the *chef-d'œuvre* of the Indian weaver. At Calcutta embroidered muslin is called *chikan* ["needle" work]. Muslins woven with colored thread, and striped, checked, and figured, are made at Benares, Arni, Nellore, and Chicacole in Madras; printed muslins at Trichinopoly, and gold and silver printed muslins at Jaipur, and Hyderabad in the Dakhan. "The process," Dr. Forbes Watson writes, "by which this mode of decoration is accomplished is by stamping the desired pattern on cloth with glue; the gold or silver leaf, as the case may be, is then laid on, and adheres to the glue. When dry, what has not rested on the glue is rubbed off." In Persia, in the rare Ispahan chintzes, I am

informed, the gold is sprinkled in the form of dust on the pattern previously prepared with size.

The calicoes Dr. Forbes Watson classifies as (a) plain calicoes, bleached and unbleached, made all over India; (b) calicoes woven with colored thread, comprising, first, *susis* and *kesis*, striped cloths of brilliant hue, made largely in the Panjab and Sindh, and also at Surat, Palamcottah, Cuddalore, and other places in Madras, and used chiefly for trouserings; second, also striped, manufactured in Nipal and Pegu, and used for skirts; and third, checks and tartans, used also for skirts and petticoats, and manufactured at Ludianah, Baroach, Tanjore, Cuddalore, Masulipatam, and other places in Madras; and (c) printed calicoes [chintzes, *pintadoes*], first on a white ground, manufactured at Fattahgarh, Masulipatam, and Arcot, &c.; second, printed on a colored ground, manufactured at Shikarpur, Agra, Fattahgarh, Bijapur, Bellary, Arcot, and Ponneri, in Madras; and third, the celebrated *palampores*, or "bed-covers," of Masulipatam, Fattahgarh, Shikarpur, Hazara, and other places, which in point of art decoration are simply incomparable. As art works they are to be classed with the finest Indian pottery, and the grandest carpets. Lastly, Dr. Forbes Watson classes together the miscellaneous cotton fabrics, chiefly made for Anglo-Indian use, such as the pocket-handkerchiefs of Nellore; the damask and diaper tablecloths, napkins, and towels of Madras, Salem, Masulipatam, Cuddalore, and Baroach; and the counterpanes and quilts of Karnul, Hyderabad in the Dakhan, and Ludianah.

Lace.

Lace-work has only recently been introduced into India, but the natives show a singular aptitude for it, and the excellent samples of it in cotton, silk, and gold and silver thread among the Prince of Wales' presents from Tinnevely and Nagarcoil in Madras leave nothing to be desired either in design or manipulation.

A white lace called *gota*, and a colored variety, called *pattia*, are made in the Punjab.

Silks.

As silk is woven with the striped cotton *susis* of the Punjab and Sindh, so we find cotton mixed with silk in the silken piece goods known in India under such names as *mashru* and *sufi*, meaning "permitted" and "lawful." It is not lawful for Mahomedans to wear pure silk [*holosericum*], but silk mixed with cotton they are permitted to wear; and hence the well-known Indian fabrics with a cotton warp or back, and woof of soft silk in a striped pattern, having the lustre of satin, or *atlas*, are called *mashru*. *Sufi* is the name given to the striped [*gulbadan*] "lawful" [*sufi*] silks, called also *shuja-khanis*, of Bhawalpur, which differ from *mashrus* in that they have no satiny lustre, and look like a glazed calico. They can scarcely be distinguished from *susis*, and are glazed with a mucilaginous emulsion of quinceseed. These mixed stuffs are also found plain and checked and figured, and are largely made in the Panjab and Sindh, at Agra, Hyderabad in the Dakhan, Tanjore and Trichinopoly. Pure silk fabrics, striped, checked, and figured, are chiefly made at Lahore, Agra, Benares, Hyderabad in the Dakhan, and Tanjore. The printed silks worn by the Parsi and Bhatia and Bunia women of Bombay are a specialty of Surat. Wild silk [*tasar*, *eria*, and *munga*] is woven chiefly in Cachar, and at Darjiling, Bhagalpur, and Warangal. Gold and silver are worked into the decoration of all the more costly loom-made garments and Indian piece goods, either on the borders only, or in stripes throughout, or in diapered figures. The gold-bordered loom embroideries are made chiefly at Sattara, and the gold or silver striped at Tanjore; the gold figured *mashrus* at Tanjore, Trichinopoly, and Hyderabad in the Dakhan; and the highly ornamented gold figured silks, and gold and silver tissues principally at Ahmedabad, Benares, Murshedabad, and Trichinopoly. Dr. Forbes Watson restricts

the term Tissues to cloths of gold and silver, *ruperi* and *soneri*, made of flattened strips of gold. The native word *kincob* is also generally restricted to the highly ornamented gold, or silver wrought silk brocades of Murshedabad, Benares, Ahmedabad, and other places; but, as these *kincobs* are in their style and essential character, older than the use of silk in India, Babylonia, Phoenicia, and Egypt, the name is confusing when used in connexion with the history of decorative art, unless understood in a sense coextensive with brocade. The description which Homer gives of the robe of Ulysses in the nineteenth book of the *Odyssey* accurately describes a Benares *shikargah*, or happy "hunting ground" *kincob*.

"In ample mode

A robe of military purple flow'd
O'er all his frame; illustrious on his breast
The double-clasping gold the King confest.
In the rich woof a hound, mosaic drawn,
Bore on full stretch, and seized a dappled fawn;
Deep in his neck his fangs indent their hold;
They pant and struggle in the moving gold.
Fine as a filmy web beneath it shone
A vest, that dazzled like a cloudless sun.
The female train who round him throng'd to gaze,
In silent wonder, sigh'd unwilling praise.
A sabre when the warrior pressed to part,
I gave enamelled with Vulcanian art;
A mantle purple tinged, and radiant vest,
Dimension'd equal to his size, express'd
Affection grateful to my honor'd guest."

And when this passage is read with others in Homer, proof is added to proof of the traditional descent of the *kincobs* of Benares, through the looms of Babylon and Tyre and Alexandria, from designs and technical methods which probably, in prehistoric times, originated in India itself, and were known by the Hindus already in the times of the Code of Manu, and before the date of the Ramayana and Mahabharata.

Thus in *Iliad*, iii :

" Meantime to beauteous Helen from the skies,
The various goddess of the rainbow flies.
Here in the palace at her loom she found
The golden web her own sad story crown'd ;
The Trojan wars she weav'd, herself the prize,
And the dire triumph of her fatal eyes."

And *Iliad*, v :

" Pallas disrobes ; her radiant veil unty'd,
With flowers adorn'd, with art diversify'd."

And *Iliad*, vi :

" The largest mantle her rich wardrobes hold,
More prized for art, than labour'd o'er with gold."

" The Phrygian Queen to her rich wardrobe went,
Where treasured odours breathed a costly scent.
There lay the vestures of no vulgar art,
Sidonian maids embroidered every part,
Whom from soft Sidon youthful Paris bore,
With Helen touching on the Tyrian shore.
Here as the Queen revolv'd with careful eyes
The various textures and the various dyes,
She chose a veil that shone superior far,
And glow'd refulgent as the morning star."

And in *Od.* xv :

" Meantime the King, his son, and Helen, went
Where the rich wardrobe breathed a costly scent.
The King selected from the glittering rows,
A bowl ; the Prince a silver beaker chose.
The beauteous Queen revolved with careful eyes
Her various textures of unnumber'd dyes,
And chose the largest ; with no vulgar art,
Her own fair hands embroider'd every part.
Beneath the rest it lay divinely bright,
Like radiant Hesper o'er the gems of night."

The two last passages are photographic vignettes from any wealthy Indian Sethia's house, and in copying them one seems to

breathe again the very odours of the costus and costly spikenard which native gentlemen wrap up with their rich apparel, and fine muslins and embroidered work.

There are many rich brocades [*kincobs*] in the India Museum, of shining dyes, and stiff with gold, from the looms of Murshe-dabad, Benares, and Ahmedabad. A *kincob* belonging to the Prince of Wales is one of the most sumptuous ever seen in Europe. It is of Ahmedabad work, rich with gold and gay with colours, and was presented to the Prince by the young Guicowar of Baroda. The stuff called *soneri*, or "golden," is richer still, but is not ornamented with a colored border; it is simply cloth of gold. *Ruperi* is made in the same way with silver, and it was doubtless in the borrowed glory of this fabric that Herod was arrayed, when enthroned before the people, in the full blaze of the sun, they hailed him as a god [Josephus, *Antiquities*, xix, viii 2].

There is an Indian brocade called *chand-tara*, "moon and stars," because figured all over with representations of the heavenly bodies; Athenæus, A.D. 230, quotes from Duris [B.C. 285-247], the description of a cloak worn by Demetrius [B.C. 330], into which a representation of the heavens, with the stars and 12 signs of the Zodiac, was woven in gold; and Josephus [A.D. 37-100] states [*Wars of the Jews*, Bk. v, ch. v 4] that the veil presented to the Temple by Herod, "was a Babylonian curtain, embroidered with blue and fine linen, and scarlet and purple, and of a contexture that was truly marvellous. Nor was the mixture of colours without its mystical interpretation, but a kind of image of the universe. . . . This curtain had also embroidered upon it all that was mystical in the heavens, excepting that of the 12 signs of the Zodiac, in the likeness of living creatures." In 2 Chronicles iii 14, we read: "And he [Solomon] made the veil of blue and purple and crimson and fine linen, and wrought cherubims thereon." The veil of the Holy of Holies, made by Moses, Josephus [*Antiquities*, Bk. iii, ch. vi 4] states,

"was very ornamental, and embroidered with all sorts of flowers which the earth produces, and there were interwoven into it all sorts of variety that might be an ornament, excepting the forms of "animals." The passages in which various classical writers describe curtains, and carpets, and brodered work, figured with animals and men, "Persians," "portraits of Kings," and "Parthian letters," are too numerous for quotation. It is an interesting fact that at Rai Bareli and other places in Oudh a peculiar brocade is made inwoven in gold and colored silks with passages from the Vedas, the Koran, and Watts' Hymns.

Beside *chand-tara*, among other poetical names for Indian patterns of silks and *kincobs*, may be mentioned *mazchar*, "ripples of silver"; *dup-chan*, "sunshine and shade"; *halimtarakshi*, "pigeon's eyes"; *bulbulchasm*, "nightingale's eyes"; and *murgala*, "peacock's necks."

The manufacture of colored silks was, of course, originally introduced into India from China, but at what period it is almost impossible to say. They are mentioned, as we have seen, in the Ramayana, but whether of Chinese manufacture or Indian cannot now be determined. In the Mahabharata it is said that the Chinas, Hunas, Kaskas, and Cauchas, who lived in the mountains, "brought as tribute to Yudhisthira, silk and silkworms." If the "Chinas" here mentioned were really the Chinese, the question would be settled, but from their association with the Hunas, &c., they were probably some tribe of the North-Western Himalayas; and so everything is left in obscurity as to the first introduction of Chinese silk into India. It is not even known whether the Arabs, in their first arrival in India, found the silk manufacture already going on there, or introduced it themselves. In the Bible the first undoubted notice of silk is in the Revelation xviii 12. The Hebrew terms which are supposed to refer to silk are *meshi* and *demeshek*. The former, in Ezek. xvi 10, 13, is translated by "silk," and the latter, in Amos iii 12, by Damascus:—"Thus saith the Lord, As the shepherd taketh out of

the mouth of the lion two legs or a piece of an ear, so shall the children of Israel be taken out that dwell in Samaria in the corner of a bed, and in Damascus in a couch." It has been thought that in this verse *demeshek* should be translated by silk. The *shesh* [probably the same word as *demeshek*] of Genesis xli 42, of many chapters in Exodus, and of Ezekiel xxvii 7, is in all these places uniformly translated in the authorized English version of the Bible by "fine linen" and "linen," that is, of Egypt. But in Genesis xli 42, the margin gives "silk," and *shesh* is translated by "silk" in Proverbs xxxi 22. Elsewhere the Hebrew words which have been translated by "linen" and "fine linen" are *bad*, in Exodus xxviii 42, xxxix 28, Leviticus vi 10, and xvi 4, 23, 32, 1 Samuel ii 18, and xxii 18, 2 Samuel vi 14, 1 Chronicles xv 27, Ezekiel ix 2, 3, 11, and x 2, 6, 7, and Daniel x 5, and xii 7; *butz* [βύσσος], 1 Chron. iv 21, xv 27, 2 Chron. ii 14, iii 14, and v 12, Esther i 6, and viii 15, and Ezekiel xxvii 15; *sadin*, Judges xiv 12, 13; *etun*, Proverbs vii 16, a word which, if it is identical with the Greek ὀθόνη and ὀθόνηον, would mean not linen but cotton; and *pishtah*, Leviticus xiii 47, 48, 52, 59, Deuteronomy xxii 11, and Jeremiah xiii 1, translated "flax" in Exodus ix 31, Judges xv 14, Proverbs xxxi 13, Isaiah xix 9, and xlii 3, and Hosea ii 5; and "tow" in Isaiah xliii 17, *pistah* in fact denoting in Hebrew not only linen stuffs, but flax, and the flax plant. Richstofen believes the *sherikoth* of Isaiah xix 9, to be silk. It is difficult to believe that the Egyptians did not weave raw silk, as we know that they possessed the art of reducing Chinese silks to a sort of muslin-like web,

"A wondrous work, of thin transparent lawn,"

as Lucan describes it [Bk. x] in the account he gives of Cleopatra's feast to Cæsar; and it is quite possible that "the fine linen of Egypt," and "the fine linen of Colchis," which was sent to Sardis to be dyed [Herodotus ii 105], may have included silk.

It was not, however, until the time of Julius Cæsar [B.C. 47] that Chinese silks began to be largely introduced into Southern Europe, and Virgil is the first classical writer who is supposed to allude unequivocally to it, in the second *Georgic*:

“Black ebon only will in India grow,
And odorous frankincense on the Sabæan bough.
Balm slowly trickles through the bleeding veins
Of happy shrubs in Idumæan plains.
The green Egyptian thorn, for medicine good,
With Ethiop's hoary trees, and woolly wood,
Let others tell: and how the *Seres* spin
Their fleecy forests in a slender twine.”

Aristotle certainly knew the silkworm, βόμβυξ, and its cocoons, βομβύκια, [*Hist. An.* v 19 (17), 11 (6)]. He describes it as “A certain great worm, which has as it were horns, and differs from others, at its first metamorphosis produces a caterpillar [κάμπη], afterwards a bombylius [βομβυλιός] and lastly a necydalus [νεκύδαλος]. It passes through all these forms in six months. From this animal some women unroll and separate the cocoons, and afterwards weave them. It is said that this was first woven in the island of Cos by Pamphile, daughter of Plates, πρώτη δὲ λέγεται ὑφῆναι ἐν Κῷ Παμφίλῃ Πλατέω θυγάτηρ.” Pliny [Bk. xi 26 (22)], 400 years later, following Aristotle's description, also says that Pamphile was the first who discovered the art of unravelling the silkworms' webs, and spinning tissue therefrom:—“Prima eas redordiri, rursusque texere, invenit in Ceo mulier Pamphila Latoi filia, non fraudanda gloria excogitatae rationis ut denudet feminas vestis.” This was indeed the well-known “Coa vestis,” which was so transparent that the form and colour of the body could be seen through it, as represented in the well-known *al fresco* painting at Pompeii of a dancing-girl, whose Coan vesture floats round her like a summer mist, disclosing the whole contour of her figure, and the perfect grace of her action, as through a veil of silken gauze.

"As if unclothed she stands confest,
In a translucent Coan vest."

In chapter 27 (23) of the same book Pliny describes the reeling of Coan silk, and mentions that men have not felt ashamed to make use of garments made of it in consequence of their extreme lightness in summer; adding, "the produce of the Assyrian silkworm we have left till now to the women only." But in Book vi 20 (17) all he has to say about Chinese silk is that "the Seres are famous for the wool that is found in their forests, and after steeping it in water they comb off a white down that adheres to the leaves," "and then to the females of our part of the world they give the twofold task of unravelling their textures, and of weaving the threads afresh." This, however, is no more than Lucan's "Sidonian fabric which, wrought in close texture by the sley of the Seres, the needle of the workman of the Nile has separated," in which he represents Cleopatra to have appeared before Cæsar in the full splendour of her charms when she feasted him in Alexandria. Even Dionysius Perigetes, so late as A.D. 275—325 would still seem to have had no better information regarding the natural source and the manufacture of Chinese silks than Virgil's poetical allusion. What he says is: "The Seres comb the variously colored flowers of the land to make their precious garments, rivalling in colour the flowers of the meadow and in fineness the spider's web." Aristotle does not say that the silkworm was reared, and raw silk produced in Cos; he simply describes the silkworm, and says that silk was woven first in the island of Cos by Pamphile, the daughter of Plates. Pliny would seem to have confused the manufacture of silk from cocoons with the unravelling of Chinese silks and weaving their threads again into Coan gauze; and perhaps with that of the silky stuff made from the floss-like beard of the *Pinna marina*, and still manufactured at Taranto, which was held in the highest estimation by the Greeks and Romans. Of raw silk, Indian, if not Chinese,

may have possibly been known, and woven to some extent in Western Asia, Egypt, and the island of Cos, for generations before Chinese silken stuffs were brought to the West. Then Pliny's only error would be in jumping to the conclusion, from Aristotle's simple statement about Pamphile, that the silkworm moth was bred in Cos. Pausanias, about 100 years after Pliny, also describes the silkworm; and the allusions to Chinese silk by the Roman poets from the time of Augustus are too numerous to cite. Ptolemy the Geographer [*circa* A.D. 139—'61] was the first to use the word *Serice* for China, or rather the northern part of it known later as Cathay; and the word is derived from the Chinese name of the silkworm, *see*, in Corean *sir*, whence the Greek *σίηρ*, the silkworm, and *Σήητες*, the people furnishing silk. The Latin *sericum* has been traced back to the Mongol *sirkeh*, and the *serikoth* of Isaiah xix 9, has, we have seen, been supposed to be silk. If the later identification is correct, the trade in silk between the East and West goes back to the remotest antiquity. Be this as it may, it is clear that the silkworm and its cocoon were known to the Greeks and the Romans from the time of Alexander's expedition to India, and equally clear that Chinese silk stuffs were not generally known in Southern Europe before the time of Julius Cæsar, who first displayed a profusion of them in some of those magnificent theatrical spectacles with which he was wont to entertain the populace of Rome. It was at first used only by a few women of the highest and most opulent families. In the reign of Tiberius Cæsar a law was passed that no man should disgrace himself by wearing silk "*ne vestis serica viros foedaret.*" It was priced at its weight in gold, as shewn by the anecdote told of Valerian, A.D. 253—260:—"Vestem holosericam neque ipse in vestiario suo habuit, neque alteri utendam dedit. Et quum ab eo uxor sua peteret, ut unico pallio blatteo serico uteretur, ille respondit, *absit ut auro fila pensentur: libra enim auri libra serici fuit.*" And from the Rhodian naval

regulations [*Lex Rhodia*] which are preserved, at least the clauses *de jactu*, in the Digests of the Roman Laws, published A.D. 553, we find that unmixed silk goods [*holosericum*], if they were saved free from wet, were to pay a salvage of ten per cent. as being equal in value to gold.

But the demand for silken articles rapidly increased in spite of all prohibitions and restraints and of their enormous price. So great was the drain of specie from the Eastern Empire on account of silk and other Eastern productions, that the Emperor Justinian resolved to introduce the cultivation of silkworms into Europe; and encouraged by his promises and gifts, two Persian monks succeeded, about A.D. 550, in carrying the eggs of these insects to Constantinople. The Issidones, the inhabitants of the modern Khotan, had from the earliest ages been the chief agents in the transmission of silk from China over the Himalayas into India, and across the Pamir Steppe into Western Asia and Europe. Direct traffic between China and Turkestan only began about B.C. 114, and ended A.D. 120, when the overland trade in silk fell into the hands of the Persians. At first Justinian endeavoured by means of the Christian Prince of Abyssinia to wrest a portion of the trade from the Persians; but, failing in this attempt, he succeeded in obtaining his object at last by a mere accident. The two Persian monks, who had learned among the Seres the whole process of the culture of silkworms and manufacture of silk, imparted their secret to the Emperor: and, being induced to return to China, succeeded in safely bringing back with them to Constantinople a quantity of eggs concealed in the hollow joint of a bamboo. The whole story is told by Procopius. The Greeks soon acquired great skill in the production of the raw silk, and carried on its manufacture at Thebes, Corinth, and Argos, and other places in the Peloponnesus, undoubtedly deriving their designs from the cotton and linen, if not silk looms of Al Modayn, Alexandria, Tabriz, Damascus, Tyre,

Berytus, and Antioch. Procopius indeed says that long before his time silk had been made at Tyre and Berytus. The manufacture was subsequently carried by the Saracens from Baghdad, Tabriz, Aleppo, and Alexandria into Sicily, and examples are extant of the Saracenic silks of Sicily of the twelfth century. Roger, king of Sicily, also carried a large number of silk manufacturers from Greece to Palermo A.D. 1147. From Sicily the manufacture spread into Italy and established itself at Florence, Lucca, Venice, Milan, and Genoa. From Italy Louis XI, in 1480, introduced the art into France at Tours, and in 1520 Francis I, having got possession of Milan, established the art at Lyons. Silk was made in England in the reign of Henry VI, but the great encouragement to its manufacture in this country was derived from the revocation of the Edict of Nantes by Louis XIV in 1685, which drove about 50,000 of the best French workmen to seek a refuge in England, where a large number of them established themselves at Spitalfields. When the old East India Company began to import Indian silks with other Eastern stuffs into England, a great deal of exasperation was felt by the home manufacturers of cotton, woollen, and silken goods; and at length the Legislature of this country was constrained to pass the scandalous law of 1700, already mentioned, by which it was enacted "that from and after the 29th day of September, 1701, all wrought silks, Bengals, and stuffs mixed with silk or herba, of the manufacture of China, Persia, or the East Indies, and all calicoes, painted, dyed, printed or stained there, which are or shall be imported into this kingdom, shall not be worn or otherwise used in Great Britain; and all goods imported after that day, shall be warehoused or exported again."

Whether the Saracens found the manufacture of silk already established in India or not, it is evident that they largely influenced the designs of its ornamentation in that country. *Kincobs* are now made in Ahmedabad and Benares, identical in

design with old Sicilian brocades ; and the Saracenic Sicilian silks abound in designs which prove their origin in Assyrian, or Sassanian, and Indian art. We know that the Saracens and Moors introduced colonies of Persians, and it may be presumed also of Indian workmen into Spain, to help them in their architecture : we know that Greek architects built some of their mosques at Cairo, and that the Mogol Emperors of Delhi introduced Italian and French artists and workmen to design some of their great buildings in India. Not only the *Taj*, but nearly every large native building in Rajputana, is decorated with most exquisite mosaics, never seen by Europeans, of the period of Austin de Bordeaux. Thus styles of art act and react upon one another, and nothing throws more light on the affinities and development of the modern decorative arts of Europe and India than the history of the introduction by Justinian of the silk manufacture from China into the West.

The Principal Places of Silk Manufacture in India.

The Panjab.—Silk weaving in the Panjab is still a prosperous industry. The raw silk esteemed the best by the native manufacturers is that of Bokhara and Khorasan ; and Amritsar and Multan are the principal marts for its sale. Silk, the produce of the Panjab, is also coming into use. The favorite colors in which it is dyed are :—

Yellow, dyed with *akalbir*, the root of *Datiscus Canabinus* ; also with *asbarg*, the flower of the "Cabul Larkspur" [*Delphinium* sp.].

Orange, or *soneri*, dyed with *narsingar*, the honey-scented flower of *Nyctanthes Arbor-Tristis*.

Scarlet, with cochineal first, which gives a crimson color, and afterwards with *narsingar*, which turns it vermilion.

Purple, with cochineal first, and afterwards indigo.

Lilac, with the same materials, mixed lighter.

Blue, of all shades, with indigo.

Green, of all shades from very dark to very light, dyed with indigo, and various yellow dyes, *asbarg*, *narsingar*, &c. Pea-green [*anguri*] is a very favorite color, when woven with a scarlet stripe.

Brown, of several shades, "sandalwood color" [*sandali*], "almond color" [*badami*], &c., chiefly used on thread for embroidery.

Grey, produced by sulphate of iron and galls.

Black, dyed with indigo, &c.

Madder is not employed in dyeing silk, but the use of the aniline dyes is now extensive.

The silk cloth of the Panjab is very thick and close, and strong, and quite free from the vulgar gloss of the fraudulently sized European silks, for which the natives of India have the utmost contempt. The most common of all the native Panjab silk fabrics is the *gulbadan* or striped silk; pale green with a scarlet stripe; dark, nearly black green with a scarlet stripe; yellow, with a scarlet, or crimson stripe; purple with a yellow stripe; crimson with a white stripe; and white with a green, or any other stripe. Plain silk is called *daryai*. If shot with two colors, usually red and green, it is called *dup-chan*, "sunshine and shade." If shot with many colors, as in Cashmere, *par-i-taus* and "peacock-feathers." Checked silks, like checked cottons, are called *charkhana*. *Lungis*, *kthesis*, &c., are woven garments of the same description as those in cotton of the same name. The *lungi* when of silk is usually enriched with a border of gold or silver, and variegated silk finished off with a gold or silver fringe. The silken *khes* is also edged with gold or silver; and in Lahore beautiful deep scarlet *kthesis* are made, with broad gold borders, and are much sought after. All figured or damasked silks are called *Suja Khani*, from the name, Mr. Baden Powell infers, of the person who first introduced their manufacture into the Panjab. They are made principally at Bhawalpur. Gold and silver brocaded silk is called *kinkhab* [*kincobs*]. Very little of it is made in the Panjab. Most of what is seen is

imported from Benares and Ahmedabad ; and the spread of the European fashion of plain dressing is fast driving it out of use for clothing. Silk muslin [*malmal*], and net [*dalmiyan*] is also made, chiefly for stamping with gold leaf, and brocading. Velvet [*makmal*] is not made. Formerly it was regularly imported into the Panjab from Russia, but since the English occupation of the country, it has been imported from England and France. Satin [*atlas*] is still imported from Russia, owing to its superior durability to the flimsy sized satins of England and France. Flowered satin [*mushajjar*, *i.e.* laid out with trees] is the favorite denomination. Satin from China, velvet from Central Asia, and Persia, and crimson silk called *debai Rumi* from Turkey, and the famous Andijan silk called *rumal Andijani* of Central Asia, are also imported.

The principal place of *daryai* and *gulbadan* weaving is Amritsar. Multan is celebrated for its *kheis* and *lungis*, and also produces some damasked silks [*Suja-Khanis*]. Bhawalpur is especially noted for its damasked silks. At Peshawur silk is largely made for sale in Cabul, Balk, and Merv. Throughout Cashmere the manufacture of silk of all denominations flourishes. The weavers of Kushab and Bhera, in the Shappur district, make *lungis* and *kheis* ; and some are made also at Jhelam, and at Batala in the Gurdaspur district. Netted silks and miscellaneous silk articles are extensively made in Nurpur, Pattiala, and Nabha.

Sindh.—In Sindh, silk *kheis* and *lungis* are manufactured in all the chief towns ; and the silk cloths of Tatta, as already noticed under cotton manufactures, were at one time widely famed.

North-Western Provinces.—In the North-Western Provinces Benares is one of the chief seats of the *kinco* manufacture of India.

Oudh.—In Oudh, the most important manufacture at Lucknow is still that of silver and gold brocades and lace. The basis of all these fabrics is gold and silver, or silver-gilt wire drawn to an extreme tenuity, and worked up either as round wire, or flattened into bands, or beaten and cut out into spangles. The *kalabatun* and lace makers of Lucknow are paid at an

incredibly low rate. The anonymous writer in the *Oudh Gazette*, 1877, observes:—"It is only in India that patience, dexterity of manipulation, grace in designing, trustworthiness in handling gold and precious stones, and the skill which is the result of many years of application, can be bought for threepence a day. Less advance has been made in wire-drawing in England than any other art. The process already described is identical with that used in Europe: the only difference is that the European workman is supplied with motive powers from a perpetual band worked by a steam-engine, and the native workman uses his marvellously flexible toes for the same purpose."

Bengal.—In Bengal, the manufacture of silk was at one time an important industry in the Bardwan and Rajshahye divisions. Now the growing complaint from year to year is that Bengal silks can no longer be sold at remunerative prices. The exports are annually decreasing. If the Bengal silk manufacture fails it will react seriously on the mulberry growers. It is hoped, however, that a good future is opening for the wild *tasar* silk of Bengal and other parts of India, to which the attention of European manufacturers has been drawn of late years by Mr. Wardle of Leek. In the Rajshahye division the principal manufacture is still of silk, which is made chiefly at Maldah, Bogra, Murshedabad and Rajshahye. The silk cloth of Maldah is known as Maldahi cloth. It is on record that in 1577 Shaik Bhik, of Maldah, sent three ships of Maldahi cloth to Russia by the Persian Gulf. In those days the principal patterns were *mazchar*, "ripples of silver," *bulbulchasm*, "nightingale's eyes," *kalintarakshi*, "pigeon's eyes," and *chand-tara*, "moon and stars." In Bogra, the once celebrated silk cloth called *garrad* is now made only to order.

The city of Murshedabad is still with Benares and Ahmedabad, famous all over the world for its gold brocades or *kincobs*. The two best known patterns made there are *murhgala*, "peacock's neck," and *dup-chan*, "sunshine and shade." But the manufacture has greatly declined during the last fifty years. Silk

is largely manufactured in the Nuddea division. The largest silk filatures there belong to Messrs. Watson and Co. The cocoons are supplied by seventeen villages : and the annual turn-out of silk is valued at 2,700*l*. A cloth called *bafta* is made in the Bhagalpur division of *tasar* silk in the warp, and cotton in the weft, which is very durable, and in great demand both by Europeans and natives. These *baftas* are of uniform color, dyed after being woven. Unfortunately the weavers are too poor to embark largely in the manufacture. *Tasar* cloth is made throughout Assam, and Orissa. There are an immense number of *tasar* silk weavers in Chota Nagpur ; but the growing taste among the upper classes for English clothes is depressing the trade. Inferior *tasar* silk is made in the Patna division, particularly at Gaya.

Central Provinces.—In the Central Provinces brocaded silk cloths are manufactured in all the cities which have gained distinction for their cotton manufactures interwoven with gold and silver wire ; the wire being used either round, or flattened [*badla*], or twisted round silk [*kalabatun*]. A silk cloth is made at Nagpur, of a brilliant crimson color, deeply bordered with gold. *Mushru* ["permitted"] silks are woven at Chanda : and *tasar* silk at Narsingpur.

The Berars.—In the Berars silk is woven at Ellichpur, Akola, and other large towns ; and *tasar* silk at Garcharoli.

Bombay.—In the Bombay Presidency the *kincobs* of Ahmedabad are the noblest produced in India. Before the beginning of the sixteenth century the silks, brocades [*kincobs*], and dyed cotton cloths of Ahmedabad, generally bearing the name of Cambay, the port of their shipment, were in demand in every Eastern market from Cairo to Peking. The wild tribesman of the Malayan Archipelago did not consider his freedom earned until he had stored up a pile of them equal in height to himself. On the coast of Africa they were exchanged for four times their weight in gold. The Portuguese on first going to India found the

merchants of Cambay their keenest rivals, and their ships their richest prizes. It was the piracies of the Portuguese which gave the first shock to the prosperity of Ahmedabad. In the eighteenth century its trade was still further drawn away from it by the English factory at Surat : and from that date this once magnificent emporium of the commerce of Western Asia, gradually declined to its present position of serene and opulent isolation. The chief excellence of its silk manufacture lies in the brilliant colors of its plain silks, and the purity and strength of its brocades. China is the chief source of supply for the raw silk, but some comes from Bengal, some from Bussora, and some from Bokhara. At Ahmedabad it is reeled, sorted, spun, warped, dyed, dressed, woven, and brocaded. To weave the brocades a more complicated arrangement of the loom is necessary than for ordinary silk weaving. A kind of inverted heddles called the *naksh* [“picture” i.e. design] is hung above the warp immediately behind the heddles, the other ends of the cords being fastened to a horizontal band running below the warp. Like the cords of a heddle the *naksh* strings where they cross the warp have loops through which certain of the warp threads are passed. But instead of getting an up-and-down motion from treddles pressed by the weaver’s foot, the *naksh* is worked, from above, by a child seated on a bench over its father’s head. The little fellow holds a bar of wood, and by giving it a twist, draws up the cords attached to the threads of the warp, which, according to the *naksh*, or pattern, are at any time to appear in the surface of the web. The weaver, at the head of the loom, adds variety to his design by working silks of divers colors into the woof, along with threads of silver and gold : and thus the vision grows in the sight of the young child seated aloft.

Considerable quantities of silk goods are manufactured at Surat. *Mashru* and *elaicha*, of mixed cotton and silk, formerly much used, are now going out of fashion : but the demand for a smooth polished silk cloth known as *gaji*, used for *cholis* [bodices], even

by the poor, is increasing. The weaving of brocade, or *kinco*, is an important industry at Surat, and although the growth of European fashions in dress has considerably reduced the local consumption, an increased demand has recently sprung up in Siam and China for these Surat and Ahmedabad brocades. They are also sought by the wealthy in the native states all over India.

The silks of Tanna are of ancient fame. A very superior yellow cloth called *pitambar* [literally "yellow"] is made there still. It is also made at Yeola, in the Nassik collectorate, and at Poona. It is worn by both men and women on sacred occasions. Other fine silks likewise are woven both at Yeola and in the town of Nassik, with borders of silver or gold. Silk *saris* are made at Bagmandli in the Ratnagiri collectorate: and Gulutgud in the Kaladji district is distinguished for its *cholis* and *saris* of mixed silk and cotton.

Madras.—In the Madras Presidency silk is manufactured throughout Mysore; and at Kengeri, Closepet, Channapatna, Kankanhalli, Nelamangala, Kolar, Malura, Kunigal, and Huliurdurga. Silk purses, cords, and tassels, are made largely by the Mahommedans of Sindkurgate, Narsipur, and Chauraypatna, in the Hasan district. Silk of rich texture and costly patterns is made at Bangalore. There are silk manufactures also in the Tumkur district, and in the Chittledrug district at Malkalmuru and Harihar. At Mysore a silk cloth interwoven with lace commands a high price.

Gold and Silver Lace.

There is an immense manufacture all over India, and particularly in the old royal cities, of gold and silver wire, gold and silver thread [*kalabatun*], gold lace, gold and silver foil, spangles, and other tinsel, for trimming shoes and caps, stamping muslins and chintzes, embroidering shawls, and other woollen fabrics, weaving into brocades, and the manufacture of gold and silver cloth of tissue. In the Panjab, Delhi is the great depôt of

the crafts of gold lace weaving, spangle-making, gilt embroidery, and all the trades connected with silver-gilt wire-drawing, and gilt thread. But the Lahore *kandla kash*, or gilt wire-drawers enjoy a reputation for special purity in the gold and silver employed by them.¹ Gold spangles [*bindli*] are a specialty of Kangra, where they are stuck on the face and forehead with gum. In Lucknow the principal varieties of lace formed from gold and silver wire are *lachka*, *kalabatu*, and *lais* [lace]. In the variety called *lachka* the warp is of silver-gilt strips, woven with a woof of silk. It is often stamped with patterns in high relief, and is much and widely used for edging turbans and petticoats. In the variety known as *kalabatu*, strips of gilded silver are twisted spirally round threads of yellow silk, and then woven into a tape or riband exactly resembling *lachka* in appearance. In the variety called *lais* the woof is of wire and the warp of silk. The strips of silver gilt used in making *kalabatu* and *lachka* lace are prepared, as has been already stated, by beating silver-gilt wire flat. The natives of India are far superior to the Europeans in the art of wire-drawing.

The artisans of Murshedabad are renowned for their skill in gold and silver lace making, for embroidery. The making of gold and silver thread, and gold and silver lace, and gold and tin foil, and all manner of tinsel ornaments, is a most thriving industry at Ahmedabad, Surat, and Poona. In the town of Bombay also gold and silver thread is manufactured and used for lace. Mr. George Terry says, that with such nicety is the operation of preparing the wire performed, that two shillingsworth of silver can be drawn out to nearly 800 yards. In the manufacture of the fabric known as *tas*, the gold and silver wire used is beaten flat, forming the warp to a woof of thin silk or cotton thread. The working up of this thread into ornamental edgings for *saris* is one active branch of the manufacture. The richest and most highly-prized border is the *shikar* ["hunting"] pattern made in

¹ Mr. J. L. Kipling in the *Lahore Guide*.

Poona. Gold spangles for ornamenting the forehead are made at Surat, and much worn by the Hindu women.

In the Madras Presidency gold and silver lace and the manufactures connected with it are made largely at Dindigal in the Madura collectorate, at Bangalore, in Mysore, Vizagapatam, Chicacole, and other places.

Embroidery.

Indian embroidery is done on silk, velvet [Plate 69], cotton, wool, and leather; and the embroidery on wool of Cashmere, both loom-wrought and with the needle, is of historical and universal fame. The Cashmere shawl trade is of the highest antiquity and importance, and it is very deplorable that it should have been recently checked, owing to the use of French designs and the magenta dyes in the manufacture of these sumptuous fabrics. The cone pattern, with its flowing curves and minute diaper of flowers, characteristic of these shawls, is well known. According to Mr. Baden Powell [*Manufactures of the Punjab*, pp. 39-40], the natives distinguish the ornamentation of the shawls by different names. The *hashia* or border is disposed along the whole length, and according as it is single, or double, or triple, gives its particular denomination to the shawl. By the term *pala* is meant the whole of the embroidery at the two ends, or, as they are technically called, the heads of the shawl. The *zanjir* or chain runs above and below the principal mass of the *pala*. The *dhour*, or running ornament, is situated on the inside of the *hashia* and *zanjir*, enveloping the whole field of the shawl. The *kunjbuttha* is a corner ornament of clustering flowers. The *mattan* is the decorated part of the field or ground, and the *butha*, the generic term for flowers, is specifically applied alone to the cone ornament, which forms the most prominent feature of the *pala*. Sometimes there is only one line of these cones. When there is a double row, the *butha* is called *dokad*, *sekhad*, up to five, and *tukadar* above five. A special variety of this ornamentation is designed for the Armenian market, known

by the name of *Tara Armeni*. The few Cashmere shawls shewn in the Prince of Wales' collection are superlatively fine, some of the usual cone or shawl pattern, others snuff-colored, of softest texture inwrought with gold. One is worked with a map of the city of Srinagar, the capital of Cashmere; the streets and houses, gardens and temples, with the people walking about among them, and the boats on the deep blue river being seen as clearly, in the quaint drawing of a mediæval picture, as in a photograph. Another shawl, more soberly colored, is one mass of the most delicate embroidery, representing the conventional Persian and Cashmere wilderness of flowers, with birds of the loveliest plumage singing in the bloom, and wonderful animals stalking round, and wondering men.

Besides shawls, an immense variety of articles are made in Cashmere of shawl stuff. The wool employed in the manufacture is the down called *pushm* of the so-called Cashmere goat of Ladak: and lately the weaving of *pushmina* shawls has been introduced from Cashmere into Lucknow. The finest of the woollen stuffs called *patu* in Kangra and Cashmere, is made of camel's hair, and is therefore a true camlet. In the Panjab it is embroidered in Cashmere and at Lahore, Amritsar, and Delhi. It is also embroidered in Sindh, and is generally made up in loose burnous-like robes called *chogas*, much used by English officers in India as dressing-gowns. Ctesias compares camel's hair for its softness to Milesian wool, which Theocritus describes as "softer than sleep." A rough but remarkably durable *patu* is made from goat's hair. At Ludhiana in the Panjab the wool of Rampur, and at Amritsar the wool of Kerman, is worked up into a variety of goods, which closely resemble the finest embroidered fabrics of Cashmere. The plain shawls, colored ivory-white, scarlet, turquoise, blue, and grey, which are known in this country by the name of Rampur *chadars*, are made at Ludhiana of Rampur, that is, Bishair wool. There are 500 shops of wool manufacturers in the city, and 2,000 people employed in weaving. Sirsa,

Rohtak, Leia, and Lahore, have also large woollen manufactures beside their trade in *pashmina*, or Cashmere shawl wool: but the hill districts of Cashmere, Kangra, and Simla, produce the greatest variety of woollen fabrics. Leia, in the Panjab, is noted for its blankets; and they are likewise made of the finest quality, and often beautifully patterned, throughout Rajputana, especially at Tod-ghar, and in Meywar; and in Thar and Parkar, in Sindh. Superior blankets are made in Nuddea, at Shahabad in Patna, at Lohar-dugga in Chota Nagpur, and at Purneah in Bhagalpur, all in Bengal: at Ahmedabad in Bombay: and at Chikanayakanahalli in the Tumkur district of Mysore. Black sackcloth blankets, called *kambhlis*, are woven all over India. They are a special manufacture of Kudlighi in Bellary: and also of the Hasan, Kadur, and Chittledrug districts of Mysore.

Muslin is embroidered at Dacca and Patna; and at Delhi also in colored floss silk. Rich brodered work is made at Hydrabad and other places in Sindh, in colored silk thread and gold and silver. The embroidery of Nauanagar, and Gondal in Kathiwar, for which Cutch gets the credit, in colored silk thread, is of the same style as the well-known embroidery of Resht on the Caspian. Either the Armenian merchants introduced the style into Cutch, or from Cutch into Persia. Gold is also used in Cutch for embroidery in the Persian style of Ispahan and Delhi. The gorgeous gold embroidered velvets [*makhmal*] of Lucknow, and of Gulbargah, Aurungabad, and Hyderabad in the Deccan, used for canopies of costly state, umbrellas of dignity, elephants' cloths, horse cloths, and state housings and caparisons generally, are largely represented in the India Museum. In form they have remained unchanged from the earliest periods of Indian history, but their sumptuous gold scroll ornamentation is in design distinctly of Italian sixteenth century origin. The Portuguese were in the habit of sending satin to India to be embroidered by natives in European designs. The embroidered native apparel of Cashmere, Amritsar, Lahore, Delhi, Lucknow, Murshedabad,

Surat and Bombay, is much prized all over India; and that of Vizagapatam and Chicacole has an extensive reputation on the Coromandel coast.

It would appear that carpets originated in embroidery, and that carpets were first used, like embroideries, for hangings and palls. The earliest notices we have of this art are in the Bible, in the accounts in the Pentateuch of the furnishing of the Tabernacle, and elsewhere. In Judges v 30, we have in the song of Deborah,—"Have they not sped? have they not divided the prey, to every man a damsel or two; to Sisera a prey of divers colours of needlework, of divers colours of needlework on both sides, meet for the necks of them that take the spoil?"—the description of a style of embroidery, both needle-wrought and loom-made, still held in great esteem in India and Persia. In Ezekiel xxvii 23, 24, we read "Haran and Canneh and Eden [*i.e.* Aden], the merchants of Shebah, Asshur, and Chilmad, were thy merchants. These were thy merchants in all sorts of things, in blue clothes and brodered work, and in chests of rich apparel, bound with cords and made of cedar, among thy merchandise,"—a passage which is thought to refer to Cashmere shawls imported into Tyre through Aden. The great demand in ancient times for brodered work was for the hangings and veils of temples, and the art originated with the women who wove these veils for the temples of Egypt, India, Babylonia, and Phœnicia. To Greece and Rome embroidery came from Phrygia, and hence an embroiderer was called in Rome *Phrygiô*, and embroidered robes *Phrygiones*. Gold brodered work was called *auriphrygium*, whence the old English word Orphrey. Such work is now called "Passing." In India we find all the varieties of needlework that are found in Europe: *opus plumarium* or feather stitch, *opus pulvinarium* or cross stitch, *opus Anglicum* or chain stitch, and worked in circular lines also, but never rubbed down to obtain an effect of relief, *opus pectineum* or woven work in imitation of embroidery, and *opus consutum*, *appliqué* or cut work, in which the ornamental

figures are cut out in separate pieces of silk or cloth, and sewn on to the stuff to be embroidered. These *draps entailléz* are obviously the origin of the Persian carpets of Mashhad. The parrots, rabbits, tigers, and fawns, represented upon them have evidently been imitated from figures of these birds and beasts cut in cloth for *appliqué* work.

In many parts of India muslin is very beautifully embroidered with green beetle wings and gold. In the Prince's Collection is a piece of muslin embroidered in gold and painted spangles and imitation pearls, with a perfect effect of reality and richness. Leather is beautifully embroidered at Phaka in Sindh. The embroidered leather work of Gujarat has already been noticed. Marco Polo, bk. iii, ch. xxvi, writing of "Gozurat," says: "They also work here beautiful mats in red and blue leather, exquisitely inlaid with figures of birds and beasts, and skilfully embroidered with gold and silver wire. They are marvellously beautiful things; they are used by the Saracens to sleep upon, and capital they are for that purpose." This was written 600 years ago, and is still as true to the work described as if it had come by the last mail from Bombay. But the most wonderful piece of embroidery ever known was the *chadar* or veil made by order of Kunderao, the late Gaekwar of Baroda, for the tomb of Mahommed at Medina. It was composed entirely of inwrought pearls and precious stones, disposed in an arabesque pattern, and is said to have cost a crore [= ten millions] of rupees. Although the richest stones were worked into it, the effect was most harmonious. When spread out in the sun it seemed suffused with a general iridescent pearly bloom, as grateful to the eyes as were the exquisite forms of its arabesques.

Carpets.

Indian carpets are of two kinds, cotton and woollen. Generally they are classed as cotton *daris* and *satrangis*, and woollen

rugs and carpets, but in fact *dari* is the native word for a rug, and *satrangi* for a carpet. *Daris* and *satrangi*, however, are perfectly distinct in style and make from the usual Indian pile carpets and rugs. *Daris* and *satrangi* are made of cotton and in pattern are usually striped blue and red, or blue and white, or chocolate and blue; and often squares and diamond shapes are introduced, with sometimes gold and silver, producing wild picturesque designs like those seen on the bodice and apron worn by Italian peasant women. They are made chiefly in Bengal and Northern India, and, like the loom-made *dhotis* and *saris*, illustrate the most ancient ornamental designs in India, perhaps earlier even than the immigration of the Aryas. Striped *satrangi*s of very superior texture are made at Rungpur in the Rajshahye division of Bengal. The manufacture of pile carpets was probably introduced into India by the Saracens. They certainly introduced it into Europe, where, in the Middle Ages, carpets of the nature of woollen stuffs, ornamented somewhat in the manner of *draps entaillez*, were called Sarracinois. Towards the end of the twelfth century the Flemings began to weave pictured tapestries, but it was not until the reign of Henry IV, A.D. 1596, that the modern carpet manufacture was introduced from Persia into France. It is from Persia that the Saracens must have derived the art of making pile carpets, for nearly all the patterns on them in India and elsewhere can be traced back to Persian originals. In the paintings of the old masters we see, in the representation of oriental carpets on floors, and hung out of windows, the origin of the designs afterwards made vulgar by their imitation in "Brussels carpets." But it is not easy to determine when woollen pile carpets were first made in Persia. Homer mentions carpets, and by their present name *τάπητα*, as in *Il.* ix 200.

"With that the chiefs beneath his roof he led
And placed in seats with purple carpets [*τάπητοι τε πορφύρεοισιν*] spread."

And *Od.* iv 124

“ To spread the pall [τάπητα] beneath the regal chair,
Of softest wool [μαλακοῦ ἐρίοιο] is bright Alcippe's care.”

And *Od.* iv 298 :

“ And o'er soft palls of purple grain, unfold
Rich tapestry [τάπητας] stiff with inwoven gold.”

And *Od.* x 12 :

“ on splendid carpets lay.”

[Εὐδονοῦ' ἐν τε τάπησι]

Pliny, where [Book viii, ch. 73-74 (48)] he describes the different kinds of wool and their colors, and different kinds of cloths, says : “ The thick flocky wool has been esteemed for the manufacture of carpets from the earliest times ; it is quite clear from what we read in Homer that they were in use in his time. The Gauls embroider them in a different manner from what is practised by the Parthians. Wool is compressed also for making a felt. . . . and the refuse, too, when taken out of the vat is used for making mattresses, an invention, I fancy, of the Gauls. . . . Our ancestors made use of straw for the purpose of sleeping upon, just as they do at present when in camp. The *gausapa* has been brought into use in my father's memory, and I myself recollect the *amphimalla* [napped on both sides] and the long shaggy apron being introduced.”

It is evident that some sort of baize, or felt, or drugget, used as tapestry for the wall, and for coverlets for beds, as well as for rugs or carpets, is meant in all these passages. Arrian, in his account of the tomb of Cyrus [Bk. vi 29], which is taken from Aristobulus, who not only was an eye-witness of it, but was ordered by Alexander to repair it, says : “ Within this edifice was the golden coffin, wherein the body of Cyrus was preserved, as also the bed whose supporters were of massy gold curiously wrought, the covering thereof was of Babylonian tapestry, the carpets underneath of the finest wrought purple ; the cloak and other royal robes were of Babylonian, but the drawers [*pijamas*]

of Median workmanship. Their color was chiefly purple, but some of them were of various dyes. The chain round his neck, his bracelets, his earrings, and his sword, were all of gold, adorned with precious stones. A costly table was also placed there, and a bed whereon lay the coffin, which contained the king's body." Athenæus has many allusions and references to carpets, and in the account which he gives [Bk. v, ch. 27], from Callixenus the Rhodian [B.C. circa 280], of a banquet given by Ptolemy Philadelphus at Alexandria, the carpets which were laid in the tent are accurately described: "There were also golden couches, with the feet made like sphinxes, on the two sides of the tent, a hundred on each side. . . . And under these there were strewed purple carpets of the finest wool, with the carpet pattern on both sides. And there were handsomely embroidered rugs, very beautifully elaborated. Besides this, thin Persian cloths covered all the centre space where the guests walked, having most accurate representations of animals embroidered on them." It is not possible to say what kind of carpets those mentioned by Arrian were, beyond that they were Babylonian; but the carpets described by Callixenus, are the woollen *galims* still made in Kermanshah, the same on both sides, the "*Babylonica texta*" of Martial, and the embroidered *shamyanas*, or canopy cloths [*aulea*, Arras], of which a superb one is shewn by the Prince of Wales, still made in Persia, and evidently the "*Babylonica peristromata*" and "*consuta tapetia*," "Babylonian hangings" and "embroidered tapestry" of Plautus. As velvet [*makhmal*] probably originated in Central Asia, and certainly felt, I think it very likely that it was there also that the Turkish tribes first developed the art of sewing tufts of wool on the strings of the warp of the carpets they had learned to make from the Persians, and that the manufacture of these pile carpets was thus introduced by the Saracens into Europe from Turkestan through Persia. The Turks were driven to the invention by the greater coldness of their climate.

These pile carpets are called in India specifically *kalin* and *kalicha*. The foundation for the carpet is a warp of the requisite number of strong cotton or hempen threads, according to the breadth of the carpet, and the peculiar process consists in dexterously twisting short lengths of colored wool into each of the threads of the warp so that the two ends of the twist of colored wool stick out in front. When a whole line of the warp is completed, the projecting ends of the wool are clipped to a uniform level, and a single thread of wool is run across the breadth of the carpet, between the threads of the warp, just as in ordinary weaving, and the threads of the warp are crossed as usual; then another thread of the warp is fixed with twists of wool in the same manner; and again, a single thread of wool is run between the threads of the warp, across the carpet, serving also to keep the tags of wool upright, and so on to the end. The lines of work are further compacted together by striking them with a blunt fork [*kangi*], and sometimes the carpet is still further strengthened by stitching the tags of wool to the warp. Then the surface is clipped all over again, and the carpet is complete. The workmen put in the proper colors either of their own knowledge or from a pattern. No native, however, works so well from a pattern as spontaneously. His copy will be a facsimile of the pattern, but stiff, even if it be a copy of his own original work. His hand must be left free in working out the details of decoration, even from the restraint of the examples of his own masterpieces. If he is told simply, "Now I want you to make something in this style, in your own way, but the best thing you ever did, and *you may take your own time about it, and I will pay you whatever you ask,*" he is sure to succeed. It is haggling and hurry that have spoiled art in Europe, and are spoiling it in Asia. The loveliest little mosque in Bombay was built without a plan, the workmen day by day tracing roughly on the ground the designs by which they worked. The best Oriental pile carpets are those of Persia, particularly those made

in Khorassan, Kirman, Ferahan, and Kurdistan, and of Turkey, made chiefly at Ushak in Asia Minor, near Smyrna. In India they are chiefly made in Cashmere, Afghanistan, the Panjab, Baluchistan, and Sindh, at Agra, Mirzapur, Jubbulpur, Hyderabad and Warangal in the Nizam's Dominion, and on the Malabar coast and at Masulipatam. Velvet carpets are also made at Benares and Murshedabad, and silk pile carpets at Tanjore and Salem. The carpets shewn at the India Museum have been arranged by Mr. Vincent Robinson, by whom many of them are lent; and the extent and completeness of the series is a sufficient evidence of the important trade in Indian carpets which has sprung up since 1851, when for the first time, through the liberality of the Indian Government, they were brought prominently to the notice of English people. Unfortunately there has been a great falling-off in the quality and art character of Indian carpets since then, partly, no doubt, owing to the desire of the English importers to obtain them cheaply and quickly, but chiefly owing to the disastrous competition of the Government jails in India with the native weavers.

The chief blame however for this lamentable deterioration must be attributed to the want of knowledge and appreciation, on the part of the general mass of English purchasers. Few people seem able to realise that when buying oriental carpets they are in fact choosing works of art, and not manufacturer's "piece goods," produced at competition prices. Formerly the native weaver strived his utmost to produce a work which would prove a pleasing picture, knowing that the payment he would obtain for it would depend upon its beauty of design and superexcellence of fabrication; but now his first thought is to reduce his work to the charges ruling in the European markets, and to deliver it punctually within the time fixed by the export firms of Calcutta, Madras, and Bombay. The natural result is seen in a comparison of the old carpets of Cashmere, Sindh, and Baluchistan, the carpets, that is to say, of only twenty and thirty

years ago, with those now made in these countries, to say nothing of the mongrel manufactures of the Government jails in India. The attempt indeed to set a trade value of "so much per square yard" upon such art works as Indian tapestries is not more absurd, or less ruinous to their production, than it would be to apply the same procedure to the purchase of pictures.

The difference in the European and Asiatic methods of rewarding art manufacturers is indeed the original reason why so little art is found in European manufactures, or in oriental works prepared for the European markets; and indicates the true cause of the immense superiority of the ancient examples of the latter possessed by such *connoisseurs* as Signor Castellani, Sir Frederick Leighton, Baron Rothschild and M. Albert Goupil, over the sumptuary articles now imported from the East. Thus the carpet jury of the Paris Exhibition of 1878 based their awards as much upon the quantity produced by each competing manufacturer, as upon the quality, in point of beauty and technical excellence, of their productions; and positively gave the highest honours to those who could shew the largest amount of business done in their trade. In the East, as we have seen, the princes and great nobles, and wealthy gentry, who are the chief patrons of these grand fabrics, collect together in their own houses and palaces all who earn a reputation for superiority in any manufacture. These skilled artificers receive a fixed salary, and daily rations, and are so little hurried in their work that they have plenty of time to execute private orders also. Their salaries are continued even when through age or accident they are past work; and on their death they pass to their sons, should they have become skilled in their father's art. Upon the completion of any extraordinary work it is submitted to the patron, and some honor is at once conferred on the artist, and his salary increased. It is under such conditions that the best art work of the East has always been produced. The finest Oriental rugs of our time, which at the Vienna Exhibition astonished all beholders, are

those made in the palace of the Governor of Kirmanshah in Kurdistan, and are only disposed of in presents.

The India Museum collection of carpets cannot of course be regarded as an ordinary commercial collection, the examples exhibited having been expressly selected to illustrate the productions of localities where the manufacture is an inherited handicraft. Jail-made carpets have therefore been scrupulously excluded from the collection. Those shewn are chiefly from Cashmere, Baluchistan, Afghanistan, the Nizam's Dominion, and the Malabar and Coromandel coasts, a few examples being added from Khiva, Bokhara, Yarkand, and Persia to illustrate the influence of the art of Turkestan and Persia on the indigenous carpet manufacture of India. In all cases the examples selected are typical illustrations of the manufacture of their respective localities of production, and are as far as possible of modern manufacture, old carpets only being chosen where the local designs have been abandoned in order to meet the requirements of European exporters. A very slight inspection of the whole collection is sufficient to shew how well founded are the complaints, made by me in 1878, respecting the fatal falling off in every quality design and fabrication in Indian carpets since the Great Exhibition of 1851.

As a striking illustration of the corruption of native designs under European influences it is only necessary to compare the two old *Cashmere* carpets lent to the India Museum by Mr. Vincent Robinson with the large Cashmere *darbar* carpet exhibited by him at Paris in 1878. The two former carpets were probably made early in the last century. The ground in one is pale yellow and in the other rose of varying shades, and the floral pattern decorating it is in half tones of a variety of colors. The borders are weak, as in all Cashmere carpets, not being sufficiently distinguished from the centre, but the coloring and general effect are so serene and pleasing that this does not really appear as a defect.

The *Cashmere* *darbar* carpet exhibited by Mr. Vincent Robinson at Paris was a typical illustration of the modern manufacture of

Srinagar. The large scroll laid about its borders in such agonised contortions had evidently been copied from the shawl patterns introduced by the French houses into Cashmere about ten years ago. The wool of these modern Srinagar carpets is good, and the texture of the carpets themselves is not bad, but it is hardly possible that they can ever again be made to satisfy a critical taste. The colors introduced are not suited for the floor of a room, particularly the green, even if they were harmoniously blended. The floor of a furnished room, in which the great need is to see the furniture distinctly, can scarcely be too grave in tone, and it is evident that the Cashmere dyes are fitted only for shawls, and *portières*, and tapestries for walls, where it is a pleasure to the eye to be attracted by lively coloring.

One of the *Afghanistan* [No. 18,389] carpets lent by Mr. Vincent Robinson is probably of Herat manufacture. It is a rare example of the best Persian style in "these antique," worm-eaten tapestries. The central ground is of glowing crimson [Kermes red], as brilliant as when first woven, and covered with large tulips in shades of blue, green, and yellow. The ground of the broad border is of shades of fine deep green covered with a rich tracery of leaves and various colored flowers, with birds among them of gorgeous plumage, yellow and blue. The introduction of the characteristic cloud pattern among the conventional tulips is of peculiar interest, as indicative of the Tartar influences so clearly marked in Persian pottery of the sixteenth century, to which period this remarkable carpet probably belongs.

The *Sindh* carpets are the cheapest, coarsest, and least durable of all that are made in India. Formerly they were fine in design and coloring, but of late years they have greatly deteriorated. The cheap rugs, which sell for about 9s. each, are made with the pile (if not altogether) of cowhair, woven upon a common cotton foundation, with a rough hempen shoot. The patterns are bold and suited to the material, and the dyes good and harmonious.

The *Baluchistan* carpets and rugs are made of goatshair, which gives them their singularly beautiful lustre, finer even than that of the Indian silk carpets, and more subdued in tone, although the dyes used in Baluchistan are richer. The patterns are usually of the fantastic geometrical character found in Turcoman rugs, from which the patterns of the early "Brussels carpets" were derived. They are laid on either a deep indigo or deep madder red ground, and traced out in orange, brown and ivory white, intermixed with red, when the ground is blue, and with blue, when the ground is red. The ends terminate in a web-like prolongation of the warp and woof beyond the pile; and when striped in colors or worked in a small diaper form a most picturesque fringe.

The famous *Jubbulpur* carpets have deteriorated in quality and art in the most extraordinary manner since the establishment of the School of Industry at that station, the influence of which has been equally prejudicial with that of the jails. The foundation, as now scamped, is quite insufficient to carry the heavy pile which is a feature of this make; and is moreover so short in the staple as to be incapable of bearing the tension even of the process of manufacture. Jubbulpur carpets often reach this country which will not bear sweeping, or even unpacking. I know of two which were shaken to pieces in the attempt to shake the dust out of them when first unpacked. The designs once had some local character, but have lost it during the last four or five years.

In *Mirzapur* carpets we again find the evidence of the indiscriminate cheapening effects of the jail system. In the Paris Exhibition of 1867, Mirzapur carpets were still shewn of fine texture, and good coloring, and serviceable wear; the designs too were suited to the coarse wool used in that district. But, in the carpets now sold, the materials are not so well chosen, the texture is coarser, and the colors are crude; and it is within proof to state that a Mirzapur carpet as now made, and sold in

Europe at about 18s. the square yard, is one of the least economical carpets which people of moderate means could lay down on their floors. The staple is so short, and the texture so loose, that it will not bear the wear and tear of a middle-class English house; and common sense is of course the backbone of good taste in furnishing. Three years will wear out any Mirzapore carpet now made. Those made ten years ago will still be in use twenty years hence, and full of dignity to the end. But as they cost twice the money, there's the rub, fatal to the once great manufacture of this district.

The *Hyderabad* carpets have also felt the influence of the jails. In the Exhibition of 1851, the very finest rugs exhibited were from Warangal, about eighty miles east of Hyderabad. The peculiarity of these rugs, of which several remain in the India Museum, was the exceedingly fine count of the stitches, about 12,000 to the square foot. They were also perfectly harmonious in coloring, and the only examples in which silk was ever used in carpets with a perfectly satisfactory effect. The brilliancy of the colors was kept in subjection by their judicious distribution and the extreme closeness of the weaving, which is always necessary when the texture is of silk. All this involves, naturally, great comparative expense, not less than 10*l.* per square yard; and it is not surprising, therefore, that in the competition with the Thug carpets of the jails, the stately fabrics of Warangal, the ancient capital of the Andhra dynasty of the Dakhan, and of the later Rajas of Telingana, have died out, past every effort to revive them. Surely the Government which has spent so much money in introducing South Kensington Schools of Art into India, might make an annual grant for the purchase of the masterpieces of Indian local manufacturers, which they should present to any native prince or gentleman to whom they wished to shew great honour. A few thousand pounds spent in this way every year would have a most beneficial effect in sustaining many local traditional arts in India now nearly dying out, even of the very recollections of men.

There is a Warangal carpet among the Prince of Wales' presents, but it is not at all of the old manufacture. The colors are too strong, the indigo very much too strong for the surrounding tones of grey, green, and yellow ; and the large leaf pattern stares obtrusively from the crude madder red ground. In addition to the Warangal carpets belonging to the Indian Museum, Mr. V. Robinson also exhibits one [No. 17,407] of sixteenth or early seventeenth century manufacture. It is a marvel of weaving. There are 400 knots to every square inch of it, giving a total of 3,500,000 for the entire surface, and so complicated is the pattern that a change of the needles was required for every knot. The length of time therefore consumed in the weaving of this carpet could not have been less than seven years, and may have been ten. The pattern is excellent, but the coloring, although dexterously harmonised, is not agreeable. It may however be that it takes an imaginary tinge from the tragic story of the body of the late Sultan of Turkey having been carried on it out of the bath room in which he was privily murdered.

The carpets of *Masulipatam* were formerly among the finest produced in India, but of late years have also been corrupted by the European, chiefly English, demand for them. The English importers insisted on supplying the weavers with cheaper materials, and we now find that these carpets are invariably backed with English twine. The spell of the tradition thus broken, one innovation after another was introduced into the manufacture. The designs which of old were full of beautiful detail, and more varied than now in range of scheme and coloring, were surrounded by a delicate outline suggested as to tint by a harmonising contrast with the colors with which it was in contact. But the necessity for cheap and speedily executed carpets for the English market has led to the abandonment of this essential detail in all Indian textile ornamentation. Crude inharmonious masses of unmeaning form now mark the spots where formerly varied, interesting, and beautiful designs blossomed as delicately as the first flowers of

spring : and these once glorious carpets of Masulipatam have sunk to a mockery and travestie of their former selves.

The carpets of *Malabar* would seem to be the only pile woollen carpets made in India, of pure Hindu design, and free at present from European as from Saracenic influences. They are made of a coarse kind of wool peculiar to the locality, and are distinguished by their large grandly colored patterns. The texture of the wool is exactly suited to the designs used, which are gay in tone, colossal in proportion, and wonderfully balanced in harmonious arrangement. No other manufacture of carpets known could hold a pattern together with such a scheme of coloring, and scale of design. The simplicity and felicity shewn in putting the right amount of color, and exact force of pattern, suited to the position given them, are wonderful, and quite unapproachable in any European carpets of any time or country. They satisfy the feeling for breadth and space in furnishing, as if made for the palaces of kings. Mr. Vincent Robinson has lent the Museum a Malabar carpet of silk [No. 21,975]. Its characteristic design is worked on a ground of red. The striking peculiarity of these silk carpets is the play of light and shade seen when walking across them, like that of shadows from passing clouds on a summer field.

These are not the only fine carpets still made in India. Those which are known in the London market by the name of *Coconada*, the place of their shipment on the Coromandel Coast to Madras, prove that carpets of uncontaminated native designs and integrity of quality are still made by the caste weavers of India, but of varieties not yet generally recognised by huckstering European dealers, and obtained from villages far away from English stations and railway lines. They are equal to anything ever produced in the Dakhan. The colors are now perhaps a little more brilliant than was observable in the memorable examples from the same district shewn in the Exhibition of 1851, now in the India Museum ; but this brilliance is really due rather to want of age,

for the details have, in a high degree, all the varied play of color and charm of pattern of the older carpets, and time only is required to mellow them to perfection. Two of these *Coconada* or *Madras* rugs [Nos. 14,205 and 14,430] have been lent to the Museum by Mr. Vincent Robinson; No. 14,430 is of a very distinctive pattern, and perhaps the most beautiful known of this variety of Indian carpets. Their weavers are Mahomedan descendants of Persian settlers.

The Indian Museum possess the most superb *Khorassan* and *Kirman* carpets I have ever seen; and Mr. Vincent Robinson's loans of carpets from *Bokhara* [No. 23,092], *Yarkand* and other places, are of the highest interest. But I can only notice in detail an antique goat's hair carpet from *Khiva* [No. 17,409]. The ground is of madder red, decorated with leaves and scrolls, and lozenge-shaped forms in red, white, and orange, each lozenge being defined by a deep line of indigo blue. The ends terminate in a fringe. Professor Vámbéry states that these rich lustrous carpets are made entirely by the nomad women about Khiva, the head worker tracing out the design in the desert sand, and handing out to her companions the dyed materials of different colors as required in the progress of weaving.

The large *Hamadan* carpet formerly hung in the India Museum, but which has since been removed by its owners, is absolutely unique in character and style; and I must at least preserve a reference to it here. An irregular lozenge form, a little island of bright clustering flowers, of which the prevailing colors are red and blue, adorns the centre, while the wide extended ground of yellow, in irregular shades, surrounds it like a rippling amber sea: and there are blue pieces in the corners, within the broad blue border, worked in arabesques. It is a carpet not to be laid on a floor, but to be hung in a gallery, to be looked at like a golden sunset. It was a sacrilege to remove it from the mosque, where it evidently was once spread under the great dome. *Beati possidentes.*

Felts, called *nammads* or *namdahs*, are largely imported into India from Khotan by way of Leh. The felts of Tabriz are beautifully ornamented with colored wools felted into them in regular arabesque designs. The manufacture of felt is a specialty of the town of Jarwal in the Bahraich district of Oudh. It is largely made in the Bellary district of Madras. The wool is spread out evenly on a *kambli* or sackcloth, and then it is moistened with gum and rolled backwards and forwards with a sort of rolling-pin until the layer of wool is all thoroughly interlaced or felted. Dyed wools can in the same way be worked into the fabric in decorative patterns of apparently the most complicated character.

Mats, called *chatai*, are made all over India. The mats of Palghat on the Malabar coast are remarkable for their strength, and those of Midnapur, in the Bardwan division of Bengal, are admired wherever they are seen for their fineness and the classical design of the mosaic-like patterns of stained grass. What are called *sitapalti* mats are made at Mymensing, Bakergunj and Sahabgunj, in the Dacca division of Bengal. At Purniah in the Bhagulpur division, mats are made of *muthi* grass; and *dorma* mats are made in Nuddea, the Presidency division of Bengal. Sylhet is noted for its ivory mats.

Apart from the natural beauty of the dyes used, and the knowledge, taste, and skill of the natives of India in the harmonious arrangement of colors, the charm of their textile fabrics lies in the simplicity and treatment of the decorative details. The knot and flower pattern appears universally, but infinitely modified, never being seen twice under the same form: and the *seventi* and lotus, which have been reduced, through extreme conventionalisation to one pattern. We have beside the shoe flower, and parrots [Plate 68], and peacocks, and lions and tigers, and men on horseback, or on foot, hunting or fighting. These objects are always represented quite flat as in mosaic work, or in *draps entailles*, and generally symmetrically and in alternation. The symmetrical

representation of natural objects in ornamentation, and their alternation, seems through long habit to have become intuitive in the natives of the East. If you get them to copy a plant, they will peg it down flat on the ground, laying its leaves and buds and flowers out symmetrically on either side of the central stem, and then only will they begin to copy it. If the leaves and flowers of the plant are not naturally opposite, but alternate, they will add others to make it symmetrical, or at least will make it appear so in the drawing. The intuitive feeling for alternation is seen in their gardens and heard in their music, and is as satisfactory in their music as in their decoration, when heard amid the associations which naturally call it forth. When the same form is used all over a fabric, the interchange of light and shade, and the effect of alternation, are at once obtained by working the ornament alternately in two tints of the same color. Each object or division of an object is painted in its own proper color, but without shades of the color, or light and shade of any kind, so that the ornamentation looks perfectly flat, and laid, like a mosaic, in its ground. It is in this way that the natural surface of any object decorated is maintained in its integrity. This, added to the perfect harmony and distribution of the coloring, is the specific charm of Indian and Oriental decoration generally. Nothing can be more ignorant and ridiculous than the English and French methods of representing huge nosegays, or bunches of fern leaves tied together by flowing pink ribbons, in light and shade, on carpets, with the effect of full relief. One knows not where to walk among them. Continually also are to be seen perfectly shaped vases spoiled by the appearance of flowers in full relief stuck round them, or of birds flying out from them. Such egregious mistakes are never made by the Indian decorative artist. Each ornament, particularly in textile fabrics, is generally traced round also with a line, in a color which harmonises it with the ground on which it is laid. In embroideries with variegated silks, for instance, on cloth or satin or velvet, a gold or silver

thread is run round the outline of the pattern, defining it, and giving a uniform tone to the whole surface of the texture. Gold is generally laid on purple, or in the lighter *kincobs* on pink or red. An ornament on a gold ground is generally worked round with a dark thread to soften the glister of the gold. In carpets, however gay in color, a low tone is secured by a general black outline of the details. All violent contrasts are avoided. The richest colors are used, but are so arranged as to produce the effect of a neutral bloom, which tones down every detail almost to the softness and transparency of atmosphere. The gold-broidered snuff-colored Cashmere shawl in the collection of the Prince of Wales presents this ethereal appearance. Light materials are lightly colored and ornamented, heavier more richly, and, in the case of apparel, both the coloring and the ornaments are adapted to the effect which the fabric will produce when worn and in motion. It is only through generations of patient practice that men attain to the mystery of such subtleties. It is difficult to analyse the secret of the harmonious bloom of Indian textures, even with the aid of Chevreul's prismatic scale. When large ornaments are used, they are filled up with the most exquisite details, as in the cone patterns on Cashmere shawls. The vice of Indian decoration is its tendency to run riot, as in Indian arms, but Indian textile fabrics, at least, are singularly free from it, and particularly the carpets. They are threatened, as has been shewn, by quite another danger.

POTTERY.

TRUEST to nature, in the directness and simplicity of its forms, and their adaptation to use, and purest in art, of all its homely and sumptuary handicrafts is the pottery of India; the unglazed rude earthenware, red, brown, yellow, or grey, made in every village, and the historical glazed earthenware of Madura, Sindh, and the Panjab.

Unglazed pottery is made everywhere in India, and has been from before the time of Manu: and the forms of it shewn on ancient Buddhist and Hindu sculptures, and the ancient Buddhist paintings of Ajanta, are identical with those still everywhere thrown from the village handwheels. In the sculptures of Bhuvaneswar the form of the *kalasa*, or water jug, is treated with great taste as an architectural decoration, especially in its use as an elegant finial to the temple towers. In the same sculptures is seen the form of another water vessel, identical with the *amriti*, or "nectar" bottle, sold in the bazaars of Bengal.

It is impossible to attempt any enumeration of the places where unglazed pottery is made, for its manufacture is literally universal, and extended over the whole and to every part of India. Mr. Baden Powell, however, cites the following places in the Panjab as worthy of special mention for their unglazed earthenware: Amritsar, Cashmere, Dera Ghazi Khan, Dera Ismail Khan, Gugranwalla, Hazara, Hushiarpur, Jhelam, Kangra, Kohat, Lahore, Ludhiana, Montgomery, Rawulpindi, and Shahpur. In Bengal the village pottery of Sawan in Patna, of Bardwan, of Ferozepur in Dacca, and Dinajpur in Rajshahye are noted: and in

Bombay that of Ahmedabad in Gujarat, and of Khanpur in the collectorate of Belgaum.

The principal varieties of Indian fancy pottery made purposely for exportation are the red earthenware pottery of Travancore and Hyderabad in the Deccan, the red glazed pottery of Dinapur, the black and silvery pottery of Azimghar in the North-Western Provinces, and Surujgurrah in Bengal [Bhagalpur], and imitation *bidri* of Patna and Surat in Gujarat, the painted pottery of Kota in Rajputana, the gilt pottery of Amroha also in Rajputana, the glazed and unglazed pierced pottery of Madura, and the glazed pottery of Sindh and the Panjab. In all these varieties of Indian pottery an artistic effect is consciously sought to be produced.

The Azimghar pottery, like most of the art-work of the Benares district, and eastward, is generally feeble and rickety in form, and insipid and meretricious in decoration, defects to which its fine black color, obtained by baking it with mustard oilseed cake, gives the greater prominence. The only tolerable example of it I have ever seen is the water-jug in the India Museum, which attracts, and in a way pleases, because of the strangeness of look given to it by the pair of horn-like handles. The silvery ornamentation is done by etching the pattern, after baking, on the surface, and rubbing into it an amalgam of mercury and tin; thus producing the characteristic mawkish and forbidding effect, which, however, the unsophisticated potter of Azimghar does not attempt to mystify by calling it by any of those artful, advertising "cries" wherewith so much ado about nothing is sometimes made in English high art galleries. Very different is the glazed pottery of Sindh and the Panjab. The charms of this pottery are the simplicity of its shapes, the spontaneity, directness, and propriety of its ornamentation, and the beauty of its coloring. The first thing to be desired in pottery is beauty of form, that perfect symmetry and purity of form which is

"When unadorn'd, adorn'd the most."

When we get it, we desire nothing more for the satisfaction of the eye. But for household use pottery must generally be glazed, and neither glazing nor coloring need detract from its dignity or comeliness, while they often enhance the delicacy of surface necessary for the complete exposition of gracefulness of configuration. If any ornamentation is applied, it must be skilfully subordinated to the form to which it is superadded, so as not in any way to divert attention from it. Nothing can be in worse taste, nor, in an æsthetic sense, more wasteful, than to hide a lovely form under an excess of foreign ornament. It is really no less so to obscure it by producing the effect of birds and flowers floating about it, as is unintentionally done in so much English pottery, painted in perspective and with shadow; or by wilfully producing the illusion of a form dissimilar to the real form ornamented, as in Japanese pottery, in which the attempt is often deliberately made to distract the eye by the most violent optical surprises and deceits. On the other hand, in the best Indian pottery, we always find the reverent subjection of color and ornamentation to form, and it is in attaining this result that the Indian potter has shewn the true artistic feeling and skill of all Indian workmasters in his handiwork. The correlation of his forms, colors, and details of ornamentation is perfect, and without seeming premeditation, as if his work were rather a creation of nature than of art; and this is recognised, even in the most homely objects, as the highest achievement of artifice. The great secret of his mastery is the almost intuitive habit of the natives of India of representing natural objects in decoration in a strictly conventional manner; that is to say, symmetrically, and without shadow. In this way the outline of the form ornamented is never broken. The decoration is kept in subordination to the form also by the monotonous repetition of the design applied to it, or by the simple alteration of two or, at the most, three designs. Also, never more than two or three colors are used, and when three colors are used, as a rule, two of them are

merely lighter and darker shades of the same color. It is thus that the Indian potter maintains inviolate the integrity of form and harmony of coloring, and the perfect unity of purpose and homogeneity of effect of all his work. The mystery of his consummate work is a dead tradition now: he understands only the application of its process; but not the less must it have been inspired in its origin by the subtlest interpretation of nature. The potter's art is of the highest antiquity in India, and the unglazed water vessels, made in every Hindu village, are still thrown from the wheel in the same antique forms represented on the ancient Buddhistic sculptures and paintings. Some of this primitive pottery is identical in character with the painted vases found in the tombs of Etruria, dating from about B.C. 1000. I do not suggest any connexion between them; it is only interesting to find that pottery is still made all over India, for daily use, which is in reality older than the oldest remains we possess of the ceramic art of ancient Greece and Italy. None of the fancy pottery made in India is equal in beauty of form to this primitive village pottery; and most of it is utterly insignificant and worthless. The only exception is the glazed pottery of Madura, and of Sindh and the Panjab, which alone of the fancy varieties can be classed as art pottery, and as such is of the highest excellence.

The Madura pottery [Plate 76] is in the form generally of water bottles, with a globular bowl and long upright neck; the bowl being generally pierced so as to circulate the air round an inner porous bowl. The outer bowl and neck are rudely fretted all over by notches in the clay, and are glazed either dark green or a rich golden brown.

The glazed pottery of Sindh [Plates 70-75] is made principally at Hala, Hyderabad, Tatta, and Jerruck, and that of the Panjab at Lahore, Multan, Jang, Delhi, and elsewhere.¹ The chief places for the manufacture of encaustic tiles are at Bulri and Saidpur in

¹ The master potters known to me by name are Jumu, son of Osman the Potter, Karachi; Mahommed Azim, the Pathan, Karachi; Messrs. Nur,

Sindh. It is said that the invasion and conquest of China by Chingiz Khan, 1212, was the event that made known to the rest of Asia and Europe the art of glazing earthenware; but, in fact, the Saracens from the first used glazed tiles for covering walls, and roofs, and pavements, and of course with a view to decorative effect. The use of these tiles had come down to them in an unbroken tradition from the times of the "Temple of Seven Spheres," or Birs-i-Nimrud, at Borsippa, near Babylon, of the temple of Sakkara in Egypt, and of the early trade between China and Egypt, and China and Oman, and the valley of the Tigris and Euphrates. Diodorus, describing [after Ctesias] the circular wall of the royal palace at Babylon, says: "The whole portrayed a royal hunting scene, beautified with divers colored forms of men and beasts, baked in the clay, and much like unto nature There was Simiramis, killing a tiger, and by her side her husband Ninus, piercing his spear through a lion." Glazed tiles had, however, fallen into comparative disuse before the rise of the Saracens, and it was undoubtedly the conquests of Chingiz Khan, A.D. 1206-1227, which extended their general use throughout the nations of Islam. The glazed pottery of the Panjab and Sindh probably dates from this period, and, as we shall presently see, was directly influenced by the traditions surviving in Persia of the ancient civilisations of Nineveh and Babylon. It is found in the shape of drinking cups, and water bottles [cf. pot and Latin *potō*, I drink], jars, bowls, plates, and dishes of all shapes and sizes, and of tiles, pinnacles for the tops of domes, pierced windows, and other architectural accessories. In form, the bowls, and jars, and vases may be classified as egg-shaped, turband, melon, and onion-shaped, in the latter the point rising and widening out gracefully into the neck of the vase. They are glazed in turquoise, of the most perfect transparency, or in a

Mahommed, and Kadmil, Hyderabad; Ruttu Wulced Minghu, Hyderabad; and Peranu, son of Jama, Tatta. Mr. Kipling sends me the name of Mahommed Hashim at Multan.

rich dark purple, or dark green, or golden brown. Sometimes they are diapered all over by the *pâte-sur-pâte* method, with a conventional flower, the *seventi*, or lotus, of a lighter color than the ground. Generally they are ornamented with the universal knop and flower pattern, in compartments formed all round the bowl, by spaces alternately left uncolored and glazed in color. Sometimes a wreath of the knop and flower pattern is simply painted round the bowl on a white ground [Plate 72].

Mr. Drury Fortnum, in his report on the pottery at the International Exhibition of 1871, observes of the Sindh pottery: "The turquoise blue painted on a paste beneath a glaze, which might have been unearthed in Egypt or Phœnicia—a small bottle painted in blue or white—is of the same blood and bone as the ancient wares of Thebes But the tiles are very important. . . . They are in general character similar to, although not so carefully made as, the Oriental tiles known as Persian, which adorn the old mosques of Egypt, Syria, Turkey, and Persia The colours used upon them are rich copper green, a golden brown, and dark and turquoise blue The antiquary, the artist, and the manufacturer will do well to study these wares. As in their silk and woollen fabrics, their metal work and other manufactures, an inherent feeling for and a power of producing harmony in the distribution of color and in surface decoration exists among the Orientals, which we should study to imitate, if not to copy. It is not for Europeans to establish schools of art, in a country the productions of whose remote districts are a school of art in themselves, far more capable of teaching than of being taught."

It is a rare pleasure to the eye to see in the polished corner of a native room one of these large turquoise blue sweetmeat jars on a fine Kirman rug of minimum red ground, splashed with dark blue and yellow. But the sight of wonder is, when travelling over the plains of Persia or India, suddenly to come upon an encaustic-tiled mosque. It is colored all over in yellow,

green, blue, and other hues; and as a distant view of it is caught at sunrise, its stately domes and glittering minarets seem made of purest gold, like glass, enamelled in azure and green, a fairy-like apparition of inexpressible grace and the most enchanting splendor.

In giving the following receipts of the different preparations used in enamelling Sindh and Panjab pottery, it is as well to say that they are of little practical value out of those countries. It will be noted that a great deal is thought, by the native manufacturers, to depend on the particular wood, or other fuel used, in the baking, which, if it really influences the result, makes all attempts at imitating local varieties of Indian pottery futile.

In the glazing and coloring two preparations are of essential importance, namely *kanch*, literally glass, and *sikka*, oxides of lead. In the Panjab the two kinds of *kanch* used are distinguished as *Angrezi kanchi*, "English glaze," and *desi-kanchi*, "country glaze."

Angrezi kanchi is made of *sang-i-safed*, a white quartzose rock 25 parts; *sajji*, or pure soda, 6 parts; *sohaga telia*, or pure borax, 3 parts; and *nausadar* or sal ammoniac, 1 part. Each ingredient is finely powdered and sifted, mixed with a little water, and made up into white balls of the size of an orange. These are reheated, and after cooling again, ground down and sifted. Then the material is put into a furnace until it melts, when clean-picked *shora kalmi*, or saltpetre, is stirred in. A foam appears on the surface, which is skimmed off and set aside for use. The *desi-kanchi* is similarly made, of quartzose rock and soda, or quartzose rock and borax, or siliceous sand and soda. A point is made of firing the furnace in which the *kanch* is melted with *kikar*, *karir*, or *Capparis* wood.

Four *sikka*, or oxides of lead, are known, namely, *sikka safed*, white oxide, the basis of most of the blues, greens, and greys used; *sikka zard*, the basis of the yellows; *sikka sharbati*, litharge; and *sikka lal*, red oxide.

Sikka safed is made by reducing the lead with half its weight of tin; *sikka zard* by reducing the lead with a quarter of its weight of tin; *sikka sharbati* by reducing with zinc instead of tin; and *sikka lal* in the same way, oxidising the lead until red. The furnace is always heated in preparing these oxides with *jhand*, or *Prosopis* wood. The white glaze is made with one part of *kanch* and one part *sikka safed* [white oxide] well ground, sifted, and mixed, put into the *kanch* furnace, and stirred with a ladle. When melted, borax in the proportion of two *chittaks* to the *ser* [$1 \text{ chittak} = \frac{1}{16} \text{ ser}$; $1 \text{ ser} = 2\frac{2}{3} \text{ lbs. avoirdupois}$] is added. If the mixture blackens, a small quantity of *shora kalmi*, or saltpetre, is thrown in. When all is ready, the mixture is thrown into cold water, which splits it into splinters, which are collected and kept for use. All the blues are prepared by mixing either copper or manganese, or cobalt, in various proportions with the above white glaze. The glaze and coloring matter are ground together to an impalpable powder ready for application to the vessel.

The following are the blue colors used :—

1. *Firoza*, turquoise blue 1 ser of glaze, and 1 chittak of *chhiltamba*, or calcined copper.
2. *Firozi-abi*, pale turquoise 1 ser of glaze, and $\frac{1}{2}$ of calcined copper.
3. *Nila*, indigo blue 1 ser of glaze, and 4 chittaks of *reta*, or zaffre (cobalt).
4. *Asmani*, sky blue 1 ser of glaze, and $1\frac{1}{2}$ chittak of zaffre.
5. *Halka-abi*, pale sky blue 1 ser of glaze, and 1 chittak of zaffre.
6. *Kasni*, pink or lilac 1 ser of glaze, and 1 chittak of *anjani*, or oxide of manganese.
7. *Sosni*, violet 1 ser of glaze, and $1\frac{1}{2}$ chittak of mixed manganese and zaffre.
8. *Uda*, purple or puce 1 ser of glaze, and 2 chittak of manganese.
9. *Khaki*, grey 1 ser of glaze, and $1\frac{1}{2}$ chittak of mixed manganese and zaffre.

The *rita* or zaffre is the black oxide of cobalt found all over Central and Southern India, which has been roasted and powdered,

mixed with a little powdered flint. Another mode of preparing the *nila*, or indigo blue glaze, for use by itself, is to take:

Powdered flint	4 parts.
Borax	24 "
Red oxide of lead	12 "
White quartzose rock	7 "
Soda	5 "
Zinc	5 "
Zaffre	5 "

All are burnt together in the *kanch* furnace as before described.

The yellow glaze used as the basis of the greens is made of *sikka zard*, white oxide 1 ser, and *sang safed*, a white quartzose rock, or millstone, or burnt and powdered flint, 4 chittaks, to which, when fused, 1 chittak of borax is added.

The green colors produced are :—

1. *Zamrudi*, deep green..... 1 ser of glaze, and 3 chittaks of *chhil tamba*, or calcined copper.
2. *Sabz*, full green 1 ser of glaze, and 1 chittak of copper.
3. *Pistaki*, or Pistachio (bright) green 1 ser of glaze, and 1½ chittak of copper.
4. *Dhani*, or Paddy (young shoots of rice), green 1 ser of glaze, and 1½ chittak of copper.

Another green is produced by burning one ser of copper filings with *nimak shor*, or sulphate of soda.

The colors, after being reduced to powder, are painted on with gum, or gluten. The vessel to receive them is first carefully smoothed over and cleaned, and, as the pottery clay is red when burnt, it is next painted all over with a soapy, whitish engobe—prepared with white clay and borax and *Acacia* and *Conocarpus* gums—called *kharya mutti*. The powdered colors are ground up with a mixture or *nishasta*, or gluten and water, called *mawa* until the proper consistence is obtained, when they are

painted on with a brush. The vessels are then carefully dried and baked in a furnace heated with *ber*, or *Zizyphus*, or, in some cases, *Capparis* wood. The ornamental designs are either painted on off-hand, or a pattern is pricked out on paper, which is laid on the vessel and dusted with the powdered color along the prickings, thus giving a dotted outline of the design, which enables the potter to paint it in with all the greater freedom and dash. It is the vigorous drawing, and free, impulsive painting of this pottery which are among its attractions. The rapidity and accuracy of the whole operation is a constant temptation to the inexperienced bystander to try a hand at it himself. You feel the same temptation in looking on at any native artificer at his work. His artifice appears to be so easy, and his tools are so simple, that you think you could do all he is doing quite as well yourself. You sit down and try. You fail, but will not be beaten, and practise at it for days with all your English energy, and then at last comprehend that the patient Hindu handicraftsman's dexterity is a second nature, developed from father to son, working for generations at the same processes and manipulations. The great skill of the Indian village potter may be judged also from the size of the vessels he sometimes throws from his wheel, and afterwards succeeds in baking. At Ahmedabad and Baroda, and throughout the fertile pulse and cereal-growing plains of Gujarat, earthen jars, for storing grain, are baked, often five feet high; and on the banks of the Dol Samudra, in the Dacca division of the Bengal Presidency, immense earthen jars are made of nearly a ton in cubic capacity. The clay figures of Karttikeya, the Indian Mars, made for his annual festival by the potters of Bengal, are often twenty-seven feet in height.

The Indian potter's wheel is of the simplest and rudest kind. It is a horizontal fly-wheel, two or three feet in diameter, loaded heavily with clay around the rim, and put in motion by the hand; and once set spinning, it revolves for five or seven minutes with a perfectly steady and true motion. The clay to be moulded is

heaped on the centre of the wheel, and the potter squats down on the ground before it. A few vigorous turns and away spins the wheel, round and round, and still and silent as a "sleeping" top, while at once the shapeless heap of clay begins to grow under the potter's hand into all sorts of faultless forms of archaic fictile art, which are carried off to be dried and baked as fast as they are thrown from the wheel. Any polishing is done by rubbing the baked jars and pots with a pebble. There is an immense demand for these water-jars, cooking-pots, and earthen frying-pans and dishes. The Hindus have a religious prejudice against using an earthen vessel twice, and generally it is broken after the first pollution, and hence the demand for common earthenware in all Hindu families. There is an immense demand also for painted clay idols, which also are thrown away every day after being worshipped; and thus the potter, in virtue of his calling, is an hereditary officer in every Indian village. In the Dakhan, the potter's field is just outside the village. Near the wheel is a heap of clay, and before it rise two or three stacks of pots and pans, while the verandah of his hut is filled with the smaller wares and painted images of the gods and epic heroes of the Rayamana and Mahabharata. He has to supply the entire village community with pitchers and cooking pans, and jars for storing grain and spices and salt, and to furnish travellers with any of these vessels they may require. Also, when the new corn begins to sprout, he has to take a water-jar to each field for the use of those engaged in watching the crop. But he is allowed to make bricks and tiles also, and for these he is paid, exclusively of his fees, which amount to between 4*l.* and 5*l.* a year. Altogether he earns between 10*l.* and 12*l.* a year, and is passing rich with it. He enjoys, beside, the dignity of certain ceremonial and honorific offices. He bangs the big drum, and chants the hymns in honour of *Jami*, an incarnation of the great goddess *Bhavani*, at marriages; and at the *dowra*, or village harvest home festivals, he prepares the *barbat*

or mutton stew. He is, in truth, one of the most useful and respected members of the community, and in the happy religious organisation of Hindu village life there is no man happier than the hereditary potter, or *kumbar*.

We cannot overlook this serenity and dignity of his life if we would rightly understand the Indian handicraftsman's work. He knows nothing of the desperate struggle for existence which oppresses the life and crushes the very soul out of the English working man. He has his assured place, inherited from father to son for a hundred generations, in the national church and state organisation; while nature provides him with everything to his hand, but the little food and less clothing he needs, and the simple tools of the trade. The English working man must provide for house rent, coals, furniture, warm clothing, animal food, and spirits, and for the education of his children before he can give a mind free from family anxieties to his work. But the sun is the Indian workman's co-operative landlord, coal merchant, upholsterer, tailor, publican, and butcher; the head partner, from whom he gets almost everything he wants, and free of all cost but his labor contribution towards the trades union village corporation of which he is an indispensable and essential member. This at once relieves him from an incalculable dead weight of cares, and enables him to give to his work, which is also a religious function, that contentment of mind and leisure, and pride and pleasure in it for its own sake, which are essential to all artistic excellence.

The cause of all his comfort, of his hereditary skill, and of the religious constitution under which his marvellous craftsmanship has been perfected is the system of landed tenure which has prevailed in India, and stereotyped the social condition and civilisation of the country from the time of the Code of Manu. The Indian *ryotwari* tenure, or system of peasant proprietorship, is first and most simply described in the Bible, in chapter xlvii of Genesis. In the seven years of plenty in Egypt, Joseph

gathered the fifth part of all the grain grown in those plenteous years, and laid it up in the cities; and when the famine came, in the first year he gathered into Pharaoh's treasury all the money in the land of Egypt and in the land of Canaan for the corn which he sold to the starving people, and when their money failed, all their cattle; and in the second year, when their money was spent, and their herds gone, he took from them all their lands, and even bought themselves into slavery, and fed them with bread for their land and the service of their bodies for that year. Thus the whole land of Egypt became the property of king Pharaoh, and all the gold and silver of the people beside, and when only their bodies were left before him, they were sold in bondage to the king. And having swept away the ancient freehold proprietors of Egypt, Joseph made a new distribution of the land among the husbandmen, requiring them to pay in return one-fifth part of their crops as rent or tax into the king's treasury. This is the regular *ryotwari* tenure, with a very moderate assessment; for whereas in most Asiatic countries the assessment generally amounts to one-half the crop, Joseph exacted only one-fifth; and it is not surprising, therefore, to find that the children of Israel, who dwelt in the land of Goshen, and had in possession the best of the land therein, prospered and multiplied exceedingly. The temple endowments, the lands of the priests, Joseph did not touch. This is a peculiarly interesting chapter for Anglo-Indians. In the end, only the legends of human pathos survive in history, and Joseph is popularly known chiefly in connexion with the story of his evil treatment by his brethren, and his touching requital of tenfold goodness into their bosoms. He was really the astute and far-sighted author of one of the greatest and most successful agrarian revolutions on record, beside which the revenue reforms of Todar Mal, under Akbar, and the "Cornwallis [Permanent] Settlement" of 1793, and the revenue survey of the North-Western Provinces, by Robert Bird, in 1824, shrink into insignificance. The system of peasant proprietorship may possibly contribute indirectly to

retard the advancement of a country, even where it does not conduce directly to the petrification of its civilisation, as in India. Under it the Hindu ryot has become so strongly attached, by the most sacred and deeply rooted ties, to the soil that, rather than relinquish his hold on it, he will burden himself and his heirs with debt for generations; and gradually, under the Hindu practice of inheritance, the holdings become so minutely subdivided, and overburdened by mortgages, that extended cultivation and high farming are made almost impossible. Notwithstanding the superior education of the Scotch peasantry, and the livelong example of the benefits of high farming all around them, it is only in the last few years that the "portioners" of the Lothians and the Merse have learned to combine together to work their "common lands" by the steam plough. At this rate the village communities of the Dakhan may be expected to postpone the scientific cultivation of the limitless arable soil of India to the Greek Kalends. It is a notable fact that while machinery should have been so readily applied in India to the production of textile and other manufactures, in which its use is injurious, its introduction in agricultural operations, in which it would so incalculably benefit the people, has been found impossible. It is quite impossible under the land system of the country at present. I remember a steam plough being introduced with great *éclat* into the Bombay Presidency. It was led in procession into the field, wreathed in roses and all of us who went to see it were wreathed with roses, and sprinkled with *attar*. But it was found impossible, utterly, to make any use of it. It was introduced into a fixed crystallised sacro-economic system in which it had no place, unless as a new divinity, and a new divinity and an idol it was made. It was put away into the village temple, and there, after a time, its great steel share was bedaubed red, and worshipped as a god. As a mere question of accounts, there can be no doubt of the solvency of India; but, owing to the restricted and imperfect cultivation of its soil, it is incapable of supporting the great cost of good government in

modern times with the elasticity and buoyancy which would at once result from the proper development of its really inexhaustible agricultural resources. The country grows rich too slowly, and the demands of a scientific government increase on it too rapidly, and the reason of it undoubtedly consists in the Indian form of peasant proprietorship. Then again, under this system, as it has been elaborated in India, there is a great loss of personal and national energy. The whole community is provided for; every man in it has his ordered place and provision. There is no stimulus to individual exertion, and the mass of the people are only too well contented to go on for ever in the same old-fashioned conservative ways as their fathers from time immemorial before them. In England the law of primogeniture, while so hard on younger sons, by throwing them on their own resources, to provide for themselves in the free professions, and in commerce and the colonies, has had the most beneficial influence on the energy of the race, and the growth of the wealth and political liberties and power of the country during the last two hundred years. Primogeniture, also, has given England a highly cultivated and powerful governing class: and every parish in the country has its "King in Israel." All this may be conceded, and even the desirableness, in the last far-off result, of a change in the old order of village life in India, to something newer and more modern. It is only to be hoped that the inevitable revolution will be left alone to the tranquil operation of time, and of the economic causes by which the country is being gradually affected through its connexion with England.¹ Perhaps the first forward

¹ Virgil's maxim in the *Georgics* [ii 412] has become famous:

" Laudato ingentia rura,
Exiguum colito."

Pliny, who alludes to these lines with approval, ascribes, indeed, the ruin of Italy to large estates. While proprietors were restricted by law to small holdings, and themselves cultivated their own farms, there was an abundance of provisions without the importation of grain, and the Republic could always command the services of a bold peasantry, their country's pride. But in after

step in the new departure will be taken by the much abused village *soukar*, or banker. The *ryot*, the pet lamb fattened up for the revenue commissioner's knife, is protected by the paternal Government against all others having a claim on his fleece.¹ The Govern-

ages, when the property in the soil became engrossed by a few, and their overgrown estates were worked by slaves, Rome was forced to depend on other countries, both for food and to recruit her armies.—“Modum agri in primis servandum antiqui putavere. Quippe ita censebant, satius esse minus serere, et melius arare. Qua in sententia et Virgilium fuisse video. Verumque contentibus latifundia perdidere Italiam: jam vero et provincias. Sex domini semissem Africæ possidebant, cum interfecit eos Nero princeps.”—Lib. xviii cap. vi. The whole of the third, fourth, fifth, and sixth chapters of this book are of remarkable interest to readers of Indian experience. Compare also Thirlwall's *Greece*, ii 34; Diodorus, i 79; and Plutarch's Solon and Cæsar. Greece and Italy wonderfully explain India, while a knowledge of India enables us to quicken the pages of Greek and Roman history with vivid life. At every turn in the Maratha country, in the hilly *marwals*, the wayfarer comes on the bed of some mountain stream tufted all along its banks, and all over the little green cyots lying amid its waste of pebbles, with mixed tamarisk and sweet-scented oleander, which carry the beholder back at once to the Ilissus and wooded slopes of Mount Hymettus. The lovely blushing oleanders are always found to shade some pure clear pool left by the river in its summer flood, at which the gentle maidens and comely matrons of the neighbouring village are filling their water jars, forming

“ . . . a group that's quite antique,
Draped lightly, loving, natural, and Greek ”;

as in the painting, on the Rogers Vase, of the women of Athens filling their pitchers at the fair flowing fountains of Callirrhoe.

¹ The outcry against the village usurer is as ancient as the settlement of the land in the East. The fifth chapter of Nehemiah might be read as an extract from the Report of the Deccan Ryots Commission; and Nehemiah, in his paternal interposition between the Jewish cultivators and the Jewish usurers, is seen to have been actuated by exactly the same spirit as an Indian Civilian. Turning to the usurers, he addressed them: “It is not good that ye do, . . . I likewise, and my brethren, and my servants [the Revenue Commissioner and Collectors and their Assistants], might exact of them [the ryots] money and corn; I pray you, let us leave off this usury. Restore, I pray you, to them, even this day, their lands, their vineyards, their olive-yards, and their houses, also the hundredth part of the money, and of the corn, the wine, and the oil, that ye exact of them. Then said they, We will restore them, and will require nothing of them; so will we do as thou sayest. Then I called the priests, and took an oath of them, that they should do according to this promise. Also I shook my lap,

ment has only mercilessly to leave him alone with his secular enemy, the *soukar*, and the village fields would probably soon pass from the poor peasant proprietor to the rich banker, and, held in fee simple, might at last be cultivated with the fullest advantage to the landlord and the State. Of course, under such a system of unrestricted competition for the soil the communal villages would disappear. The *ryotwari* tenure is very like freehold, but as it, in benevolence to the ryot, allows him to retain his lands as long as he pays the assessment on them, although he may never cultivate them, it so far restricts the transfer and proper cultivation of the land. Also, among an ignorant peasant population, the periodical revision of the assessment, paternally devised in the ryot's own interest, only serves to make him uncertain of the fixity of his tenure, and thus to restrict the improvement of his property. Even the annual settlement, which is not made to reassess the land, but to determine the amount of remission to be made for bad crops, and fields not cultivated, leads to the same result, and to unsettlement of mind and ill-will toward the Government. The ryot schemes through all the year, even against his own best interest, to swell the remissions as much as possible, and is never quite satisfied with the amount actually allowed him. The whole of this indictment against the *ryotwari* tenure, prevailing over the greater part of India, may be conceded, but we owe to it the conservation through every political change of the primitive arts of India, and when it becomes disorganised and perishes, they too will sink and pass away for ever. Popular art cannot exist in the face of the stark competition ever fomented by the development of external commerce in all things,

and said, So God shake out every man from his house, and from his labour, that performeth not this promise, even thus be he shaken out, and emptied. And all the congregation said Amen, and praised the Lord."—Nehemiah v. 9-13. Nehemiah acted, indeed, on the ruling idea of the Indian Civilians that there should be no one between the Government and the ryots who cultivated the land, and paid the assessment thereon.

including the possession of the soil, to which competition some theorists would sacrifice even national existence. We have already seen this in England. In the fifteenth century that agrarian revolution began in this country which, in the end, accumulated the national lands in the hands of comparatively few proprietors. It was then that the old rural townships began to fail in the competition with the foreign importations drawn to London; and more and more extended pasture farming became necessary to supply the wool, woollen fabrics, skin, hides, leather, and cheese for exportation to the Continent. Under the growing pressure of competition for the land, Henry VIII was tempted to the suppression of the monasteries, and the secularisation of their property led gradually to the general extinction of the old rural communities, in whose existence was now involved the whole tradition of democratic culture and the continuity of popular progress in England. Still one-third of the country was held in copyhold at the beginning of the seventeenth century. But just then began our great commerce round the Cape of Good Hope with India, and the investment of the fortunes made in it in land; and thus at length the self-dependent peasant proprietors were everywhere swept away, and with them the last refuge of the popular arts in England. There can in fact be no popular arts without popular traditions, and traditionary arts can arise only among a people whose social and municipal institutions are based in perpetuity on a democratic organisation of their inherent right and property in the national soil, such as is secured to the people of India by the *ryotwari* tenure. This it is which has created for them the conditions of society, so picturesque in its outward aspects, so unaffected and fascinating in its inner life, in which the arts of India originated, and on the permanence of which their preservation depends. For leagues and leagues round the old Maratha cities of Poona and Sattara stretch fields of corn and pulse and oil grains and deep dyeing flowers, the livelier verdure of the rice fields following the courses of the

irriguous *nullahs* like a green thread wrought in gold; and rich orchards, and high groves of mango mark the sites of the villages hidden in their shade. Glad with the dawn the men come forth to their work, and glad in their work they stand all through the noontide, singing at the well or shouting as they reap and plough; and when the stillness and the dew of evening fall upon the land like the blessing and the peace of God, the merry-hearted men gather with their cattle, in long winding lines, to their villages again. Slowly, over all the wide champaign, the black lines shrink and disappear into the lengthening shadows of the mango-trees, and the day is closed in night. Thus day follows day, and the year is crowned with gladness. It is in the contemplation of such scenes as these that the Englishman in India drinks deep of the bliss of knowing others blest. Do they not truly realise that life of contentment in moderation which is the favorite theme of Horace? Here is no

"Indigent starveling among mighty heaps."¹

The accumulation of immoderate wealth is impossible,

"Yet far aloof is irksome poverty."

And are not these the conditions under which popular art and song have everywhere sprung, and which are everywhere found essential to the preservation of their pristine purity? To the Indian land and village system we altogether owe the hereditary cunning of the Hindu handicraftsman. It has created for him simple plenty, and a scheme of democratic life, in which all are coordinate parts of one undivided and indivisible whole, the provision and respect due to every man in it being enforced under the highest religious sanctions, and every calling perpetuated from father to son by those cardinal obligations on

¹ I quote Horace in Mr. Thornton's translation, the attraction of which, for those who have ceased to be at home in classical Latin, lies in the felicity with which, while literal, it preserves the grace and harmony of the original.

which the whole hierarchy of Hinduism hinges. India has undergone more religious and political revolutions than any other country in the world ; but the village communities remain in full municipal vigor all over the Peninsula. Scythian, Greek, Saracen, Afghan, Mongol, and Maratha have come down from its mountains, and Portuguese, Dutch, English, French, and Dane up out of its seas, and set up their successive dominations in the land ; but the religious trades union villages have remained as little affected by their coming and going as a rock by the rising and falling of the tide ; and there, at his daily work, has sat the hereditary village potter amid all these shocks and changes, steadfast and unchangeable for 3,000 years, Macedonian, Mongol, Maratha, Portuguese, Dutch, English, French and Dane of no more account to him than the broken potsherds lying round his wheel.

I have gone thus fully into the Indian village potter's surroundings and antecedents because it is only by a chronological and historical reduction and a right knowledge of its economical conditions that we can get at all profitably at the origin of an art. It need not be said how much an intelligent study of the influences under which the arts of India have been produced and are sustained will help to a fuller understanding of the origin and development of Indo-European art generally. The languages and mythologies of the Indo-European nations were never recognised to be one, until the key to their unity was found in the sacred language and religion of the Hindus, and the scientific investigation of Indian art will not fail to lead to profitable, and perhaps even surprising, results.

The enamelled pottery of Sindh and the Panjab is a sumptuary and not a village art, and is probably not older than the time of Cenghiz Khan. In all the imperial Mogol cities of India where it is practised, especially in Lahore and Delhi, the tradition is that it was introduced from China, through Persia, by the Afghan Mongols, through the influence of Tamerlane's Chinese

wife; and it is stated by independent European authorities that the beginning of ornamenting the walls of mosques with colored tiles in India was contemporary with the Mongol conquest of Persia. But in Persia the ancient art of glazing earthenware had come down in an almost unbroken tradition from the period of the greatness of Chaldaea and Assyria, and the name *kasi*, by which the art is known in Persia and India, is probably the same Semitic word, *kas*, glass, by which it is known in Arabic and Hebrew, and carries us back direct to the manufacture of glass and enamels, for which "great Zidon" was already famous 1,500 years before Christ. The pillar of emerald in the temple of Melcarth, at Tyre, which Herodotus describes as shining brightly in the night, "can," observes Kenrick, "hardly have been anything else than a hollow cylinder of green glass, in which, as at Gades, a lamp burnt perpetually." The designs used for the decoration of this glazed pottery in Sindh and the Panjab also go to prove how much it has been influenced by Persian examples, and the Persian tradition of the ancient art of Nineveh and Babylon. The "knop and flower" pattern, which we all know in Greek art as the "honeysuckle and palmette" pattern, appears in infinite variations on everything.

The old glazed tiles to be seen in India are always from Mahomedan buildings, and they vary in style with the period to which the buildings on which they are found belong; from the plain turquoise blue tiles of the earlier Pathan period, A.D. 1193-1254, to the elaborately-designed and many-colored tiles of the latter part of the great Mogol period, A.D. 1556-1750. Wherever also the Mahomedans extended their dominion they would appear to have developed a local variety in these tiles. The India Museum has some remarkable examples of glazed tiles from the ruins of Gaur, the old Mahomedan capital of Bengal, which was erected into a separate kingdom almost simultaneously with Delhi itself. Mahomed Bakhtiar, the conqueror of Bihar, under Katub-ud-din, became, A.D. 1203, first king of the dynasty,

which ruled there until the state was absorbed into Akbar's vast empire, A.D. 1573. But the city of Gaur was a famous capital of the Hindus long before it was taken possession of by the Mahommedans. The Sena and Bellala dynasties seem to have resided there, and no doubt, says Mr. Fergusson [*History of Indian Architecture*, pp. 546, *et seq.*] adorned it with temples and edifices worthy of their fame. Be this as it may, some of the oldest of the India Museum Gaur tiles are not of any style of Mahommedan glazed tiles known elsewhere in India, and have a marked Hindu character, quite distinct from the blue, and diapered, and banded tiles which are distinctive of Mahommedan manufacture elsewhere in India, before the florid designs of the Mogol period came into vogue. It is quite possible therefore that enamelled pottery was made in India long anterior to the age of Cenghiz Khan. It would be well to examine any ruins about the Sena capital of Nuddea for old tiles to compare with those of Gaur. It is not at all improbable that in a country of brick architecture like Bengal glazed bricks were used by the Buddhists and Hindus for ages before the Mahommedan conquest.

The Bombay School of Art Pottery we owe chiefly to the exertions of Mr. George Terry, the enthusiastic superintendent of the school, who has a quick sympathy with native art. He has introduced some of the best potters from Sindh, and the work Mr. Terry's pupils turn out in the yellow glaze in Bombay is now with difficulty distinguishable from the indigenous pottery of Sindh. It is only to be identified by its greater finish, which is a fault. The School of Art green and blue pottery always betrays its origin by some inherent defect in the glaze or clay used. Mr. Terry has also developed two original varieties of glazed pottery at Bombay, the designs in one being adapted with great knowledge and taste from the Ajanta cave paintings, and the popular mythological paintings of the Bombay bazaars; while in the other they are of his, or his pupils' own inspiration, and derived from leaf and flower forms. Examples of all these varieties of the

Bombay School of Art Pottery, of the imitation Sindh and the Terry ware, have been put together in a separate case in the India Museum. The glazed pottery which comes from Bombay of Sindhian designs on Chinese and Japanese jam and pickle pots are a violation of everything like artistic and historical consistency in art, and if they are not ignorant productions of the pupils of the School of Art they are a most cruel slander on them. It is such eccentricities as these which have led people to doubt the utility of establishing English schools of art in India.

But if it is an unpardonable error to darken by the force and teaching of English schools of art, and the competition of Government jails, and other state institutions and departments in India, the light of tradition by which the native artists in gold and silver, brass and copper, and jewelry, and in textiles and pottery, work, it is an equal abuse of the lessons to be taught by such an exhibition of the master handicrafts of India as the India Museum presents for the manufacturers of Birmingham, and Manchester, and Staffordshire, to set to work to copy or imitate them. Of late years the shop windows of Regent Street and Oxford Street have been filled with electrotpe reproductions of Burmese, Cashmere, Lucknow, Kutch, and Madras silver and gold work, along with Manchester, Coventry, and Paisley imitations of Indian chintzes, *kincohs*, and shawls. Porcelain vases and tea services may also be seen covered all over with the Cashmere cone pattern copied literally in the gaudiest colors from some Cashmere shawl. This is simply to deprave and debase English manufactures and English taste. No people have by nature a truer feeling for art than Englishmen and women of all classes, or purer elements of a national decorative style and methods: and the right and fruitful use of looking at superb examples of Indian jewelry, tapestries, and pottery, is not to make literal counterfeits of them, but to kindle the sense of wonder and imagination in ourselves to nobler achievements in our own indigenous industrial arts. Art at second hand is already art in its decay; while nothing

serves to maintain its perennial spontaneity and purity like the inspiration which comes of the contemplation of the best examples of foreign art. English manufacturers should visit the India Museum, not to slavishly plagiarise, but to receive into their breasts a stimulating and elevating influence from the light and life of a traditional art still fresh and pure, as at its first dawning two or three thousand years ago on the banks of the ancient Indus, the mystic Saraswati, and sacred Ganges.

THE KNOP AND FLOWER PATTERN.

IN the Introduction to the *Handbook to the British Indian Section at the Paris Universal Exhibition of 1878*, I have briefly traced the development of civilisation in the course of the Aryan migration southward into Persia and India, and westward through Asia Minor, Greece, Italy, Spain, Germany, &c, and France to the British Isles; and in the Semetic and other lands which the to-and-fro trade between the Arabian and Mediterranean seas had to cross in consequence of the interposed obstruction of the Isthmus of Suez, about half way down the southern coastline of the Euro-Asian continent, or *litus Arianum*.

It is shewn how this line of coast and overland intercommunication between the East and West Aryas was subject to be constantly interrupted by the incursions of Scyths, Mongols, and other Turkish hordes, but how the trade by it still went on even after the Ottoman Turks had established their dominion between the Tigris and Euphrates, the Nile, and the Danube, and was only discarded on the discovery of the ocean way round Africa to the East. This was but 400 years ago, and for 3,000 years before, the road between India and the Mediterranean countries had been through the Tigris and Euphrates valley, and the valley of the Nile. From the time of Alexander, and through all the time of the Ptolemies and Seleucidae, and under the Roman Empire, until Egypt, Syria, and Persia were conquered by the Saracens, the intercourse between India

and Greece through Persia, Assyria, Syria, and Egypt was unbroken and intimate. Although interrupted at first, it again revived under the Saracens, and, under the Ottoman Turks, was finally suspended only after the Portuguese had obtained possession of Ormuz. Even then the Armenians continued, as they have to the present day, the local intercourse between India and Assyria and Western Asia; going to India and purchasing goods on the spot, and returning with them to Bandar Abbas, Ispahan, Baghdad, Mosul, and Tabriz.

This is quite sufficient to account for the remarkable affinity between Assyrian and Indian decorative art, and the frequent identity of their ornamental details; which, in turn, prove the continuity and intimacy of the commercial intercourse between India and Assyria. Of course the general affinity between Indian and Assyrian art may be in part due to the common Turanian substratum, and common Aryan inspiration of Indian and Assyrian civilisation. When the Aryas made their way through Afghanistan and Cashmere into the Panjab, they found the plains of the Upper Indus already occupied by a Turanian race, which they indeed easily conquered, but which, as the caste regulations of the Code of Manu prove, was far superior to themselves in industrial civilisation. These aborigines already worked in metal and stone, and wove woollen, cotton, and linen stuffs, knew how to dye them, and to embellish their buildings with paintings: the descriptions of Megasthenes prove that, even at its highest development, Hindu civilisation was more Turanian than Aryan: and the pre-Aryan Turanian civilisation of India must have been similar to the pre-Semitic Turanian civilisation of Babylonia, Chaldea, and Assyria, and probably preceded it. All that is monstrous in the decorative forms of Indian and Assyrian art, all that is obscene in Indian symbolism, is probably derived from common Turanian sources, anterior to direct commercial intercourse between India and Assyria. But, when we find highly artificial and complicated Indian decorative designs identical in

form and detail with Assyrian, we feel sure that the one must have been copied from the other, and indeed there can be no doubt that the Indian ornamental designs, applied to and derived directly from sculpture, which are identical with Assyrian, were copied from the monuments of Assyria; Egyptian, of course, from Egypt. We cannot trust alone to the allusions, references, or even descriptions of the Bible, Homer, and the Ramayana and Mahabarata to identify the art manufactures of India with those of Assyria, Phœnicia, and Egypt; by themselves they indicate generic likeness only; and their specific identity can be demonstrated only by a comparison of the actual remains of ancient art, and of its carved and painted representations on contemporary monuments. But when this identity has been proved from the monuments and other remains, the Bible, Homer, the Ramayana and Mahabharata, and Pliny are invaluable, in that they enable us to complete our information on the sure and certain foundation so laid; and to the picture thus composed of the early civilisation of the world we are justified in giving color and motion from the strictly traditional, still living, civilisation of India.

The Bible, and Homer, and the Greek poets generally, are full of idyllic scenes from the life of ancient Greece, Syria, and Egypt, which are still the commonplaces of the daily life of the natives of India, who have lived apart from the corruptions of European civilisation. There are many passages also directly illustrating the handicrafts of the ancients. In Proverbs xxx, attributed to Solomon about B.C. 1015-975, we read the praise of a good wife:—"She seeketh wool and flax, and worketh willingly with her hands. She is like the merchant's ships, she bringeth her food from afar. She riseth up while it is yet night, and giveth meat [bread] to her household. * * * She considereth a field and buyeth it; with the fruit of her hands she planteth a vineyard. * * * She perceiveth that her merchandise is good: her candle goeth not out by night. She layeth her hand to the

spindle, and her hands hold the distaff. * * * She is not afraid of the snow for her household ; for all her household are clothed with scarlet. She maketh herself coverings of tapestry : her clothing is silk and purple. Her husband is known in the gates, when he sitteth among the elders of the land. She maketh fine linen and selleth it ; and delivereth girdles unto the merchant. Strength and honour are her clothing ; and she shall rejoice in time to come. * * * Her children rise up and call her blessed ; her husband also, and he praiseth her. * * * Favour is deceitful and beauty vain, but a woman that feareth the Lord, she shall be praised. Give her of the fruit of her hands, and let her own work praise her in the gates." And in Exodus xxxvi 30-35, about B.C. 1500, we read of Bezaleel and Aholiab, the master craftsmen of the first Temple :—" And Moses said unto the children of Israel, See, the Lord hath called by name Bezaleel, the son of Uri, the son of Hur, of the tribe of Judah ; and He hath filled him with the spirit of God in wisdom, in understanding, and knowledge, and in all manner of workmanship ; and to devise curious works, to work in gold, and in silver, and in brass, and in the cutting of stones to set them, and in carving of wood to make any manner of cunning work. And He hath put in his heart that he may teach, both he and Aholiab, the son of Ahisamach, of the tribe of Dan. Them hath He filled with wisdom of heart to work all manner of work of the engraver, and of the cunning workman, and of the embroiderer, in blue and in purple, and in scarlet, and in fine linen, and of the weaver, even of them that do any work, and of those that devise cunning work." These passages [and there are numbers of the same description in Homer and Aristophanes] are sufficient to prove the close affinity of the primitive Hindu civilisation of India, in the simplicity and beauty of its life, the profound religiousness of its animating spirit, and also in the identity of many of its industrial arts, with the civilisations of Assyria, Phœnicia, and Egypt, and with that of

Greece in the heroic age at least; while even in the midst of the growing corruptions of imperial Rome we find that Augustus Cæsar brought up the females of his family and household on the antique model, and wore no clothing but such as had been made by their hands.

The researches of Mr. Fergusson have shewn that stone architecture in India does not begin before the end of the third century B.C. He has also drawn attention to the similarity in ground plan, and in some instances in elevation, of Indian temples to Assyrian and Egyptian. He observes that if the description given by Josephus of the temple at Jerusalem, as rebuilt by Herod, be read with a plan such as that of Tinnevely, it is impossible to escape the conviction that their coincidences are not wholly accidental.¹ In their grandeur and splendour of detail and in the labour bestowed on them for labour's sake, the resemblance between the temples of Egypt and Madras is most remarkable. Not less startling are the traces of Assyrian art in these temples, and Mr. Fergusson expresses the opinion that, if we are to trust to tradition or to mythology or to ethnological coincidences, it is rather to the valley of the Tigris and Euphrates than to the banks of the Nile that we should look for the *incunabula* of what are found in Southern India. The minor arts of Madras are palpably derived from the temple architecture and ornamentation of that Presidency. A Madras silver incense-stickholder belonging to Mr. W. G. S. V. FitzGerald, formed of an antelope hunted by a

¹ The resemblance which the sanctuaries of some of these Southern Indian temples bear to the Holy of Holies of the Temple of Jerusalem is obvious. In the great temple of Chillimbaram the object of worship is vacuum [*sunya-laya*]. There are numerous images of the Puranic gods to be found in the subsidiary shrines, but the shrine of the temple is only empty space. It is enclosed by a superb structure of sandal-wood, profusely decorated with gold and silver plates. A thick curtain, gloriously embroidered, screens the interior from all human sight save that of the high priest only, who is permitted to enter it but once in every year.

dog along a conventional flower stalk, and taken from the sculptures common on all Madras temples, is identical with some of the representations of hunting scenes on the Assyrian monuments given in Rawlinson's *Ancient Monarchies*. In this it is clear that India is the copyist. The knop and flower, or cone and flower, pattern is represented, with local variations, on early Indian monuments in the same form and general style as on the marbles of Assyria and in the Bharhut sculptures, at least, the lotus is repeatedly represented in the identical half conventional form in which we find it in the hieroglyphic paintings of Egypt. Here again it is obviously India which has copied from Assyria. It is quite possible, however, that some of the very forms in India which can be proved to be copied from Assyrian temples and palaces may have originally been carried into Egypt and Assyria on Indian cotton or woollen fabrics and jewelry.

The knop and flower pattern commonly found on Sindh pottery [1] is identical with the knop and flower pattern [2] on



1



2

the Koyunjik palace doorway, figured in Rawlinson's *Ancient Monarchies*, vol. i, p. 417. In the same volume, at page 493, is a circular breast ornament [3], on a royal robe, from a sculpture at Nimrud. Here the cone does not alternate with a lotus flower, but with the fan-like head of the *Hom*. Nor is the cone a lotus bud, but a larger representation of the fruit of the *Hom*. In a common form of Persian plate [4], which may [chiefly because of the circular shape of the two objects] be compared with

this breast ornament, the cone is developed into a form conical in shape, but *Hom*-like in detail, and the flower is metamorphosed into a strange Chinese style of scroll. That it is the



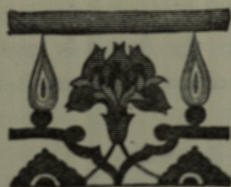
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knop and flower pattern is proved beyond dispute by the curved line which unites the base of the knop with the base of the flower, and which is found surviving in ornaments derived from this pattern when almost every other trace of it has disappeared. A modification, in point, of this pattern is repeated on the inner



4

border of the plate. A very beautiful variation of the pattern is one of the commonest seen on Sindh tiles [5], in which the knop has become the regular Saracenic cone, and the flower is not the head of the *Hom*, or lotus, but a full-blown iris. On Delhi and Cashmere shawl borders [6] the *Hom*-head-like flower often looks very like the "Shell" on Renaissance mouldings. On these shawl borders the knop and flower are often also combined [7],



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the knop becoming the cone or cypress-like trunk of a tree, the branches of which fan out like the fronds of the *Hom*. In



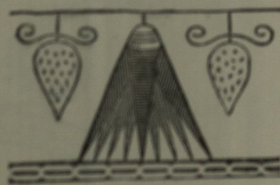
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some Indian and Persian carpets the knop or cone throws out graceful *Hom* fronds, one on either side, from the ends of which hangs a large flower, presenting the alternation of a branching cone and flower. Every other branching cone is also, as it were, upside down, so that we get a winding floriated line running in and out between each cone and flower. When the cone is large it is filled in with floral detail, as in

Cashmere shawls, the characteristic decoration of which is the last bright consummate inflorescence of the original Egyptian and Assyrian knop and flower pattern. A few engravings [8 to 19] are



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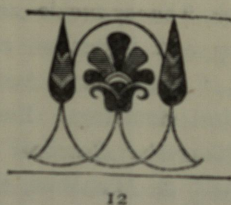
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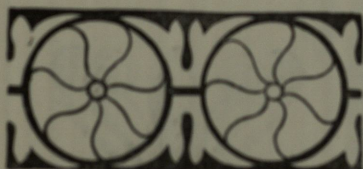
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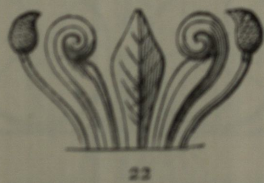
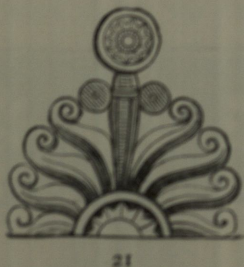
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added from Owen Jones' *Grammar of Ornament*, to shew the modification of this pattern in Egyptian, Assyrian, Greek, Italian,

Renaissance and Indian art. The Greek "honey-suckle and palmette" scroll [13] is simply the knop and flower, as are the Renaissance "shell" [14], and the "tongue and dart," and "egg and tongue" patterns of classical mouldings. Long ago Mr. Fergusson pointed out [in his *Illustrated Handbook of Architecture* vol. i, p. 7] that on the "lat" at Allahabad, the necking [20], immediately below the capital, represents with considerable purity the honeysuckle ornament of the Assyrians, which the Greeks borrowed from them with the Ionic order.



Its form is derived originally from the Date *Hom*, but it really represents, conventionally, a flowering lotus, as the Bharhut



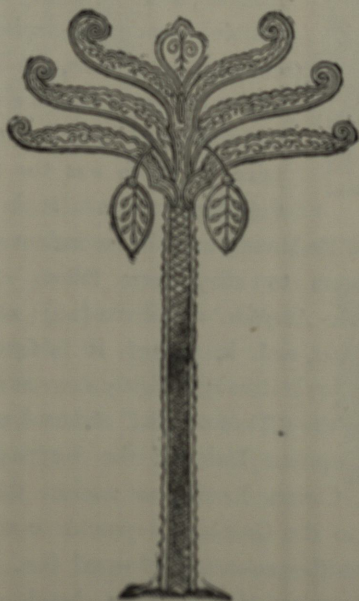
sculptures [21, 22] enable us to determine. The "reel and bead" pattern running along the lower border of the necking represents the lotus stalks. One Chinese modification [23] of the knop and flower pattern is very significant. The flower is here a pomegranate, and the cones have become green pomegranate buds; but, instead of being in their original Assyrian places, they are attached to the edge of the vermillion corolla, one on each side, while their old places are filled by a panel

formed by the curved lines, which should have joined the flower to the bud, running down between the flowers in parallel lines to the lower edge of the patterned border.

The Assyrian breast ornament figured by Canon Rawlinson proves that the fan-like pattern throwing off its long stalked cones, arranged alternately round the border with the larger cones, is the head of the *Hom*, represented in the centre, and a multitude of representations of the *Hom* in Rawlinson's *Ancient Monarchies* and Herodotus, and on old Saracenic and Sicilian brocades [24] prove that it is the



23



24

date-tree, and that the long-stalked cones flourished out from it, and the large cones which alternate with it round the border

of this breast ornament, are great clusters of dates, highly conventionalised. These cones are sometimes replaced by pomegranates, and, strange to say, the tree of life represented on modern Yarkand rugs is always a pomegranate tree. The cone figured by Canon Rawlinson, vol. ii, p. 212, as a pineapple is clearly a bunch of dates bursting from its spathe. This cone appears on late Italian and early Renaissance brocades [25] crowned, with flames rising from the crown, and alternating with oak-leaves, from which long-stalked acorns are represented issuing forth like the cones from the trunk and head of the date *Hom*.

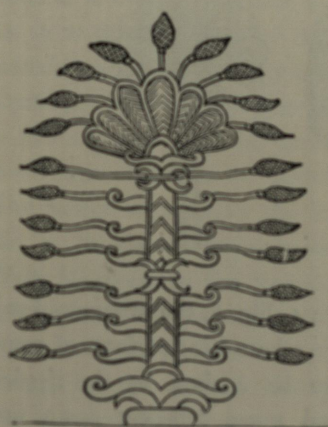


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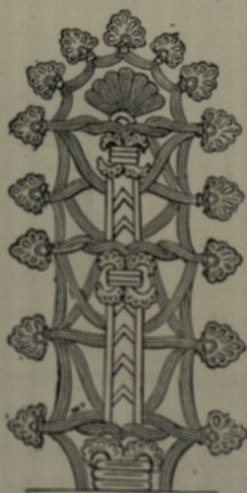
The original *Hom* was the Sanskrit *Soma*, *Sarcostemma viminale*, vel *brevistigma*, a leafless [the rudimentary leaves are scarcely visible] scandent asclepiad, with its flowers collected in umbels, fan-like *en silhouette*, a native of the southern slopes of the Cashmere Valley and Hindu Kush, the fermented juice of which was the first intoxicant of the Aryan race. It is still used as an

intoxicant by the Brahmans, and the succulent stalks are chewed by weary wayfarers to allay their thirst. It is admirably represented on the Assyrian sculptures [26]; and in Rawlinson's *Ancient Monarchies*, vol. ii, p. 236, it is figured twined very characteristically [27], although highly conventionally, about the date tree, forming the "Tree of Life," *Asherah*, or "grove," sacred to Asshur, the Supreme Deity of the Assyrians, the Lord and Giver of Life. Canon Rawlinson notices the resemblance of the *Hom* head to the Greek honeysuckle ornament, and adds, "I suspect that the so-called 'flower' (*i.e.*, honeysuckle) was in reality a representation of the head of a palm-tree." The accompanying Greek ornament [28] from the vase of Nicosthenes is obviously derived from the Assyrian form of the tree of life. Possibly the date was substituted for the original

Hom in Assyria, in consequence of the Aryas finding that they could not naturalise the true *Hom* plant, or because the date



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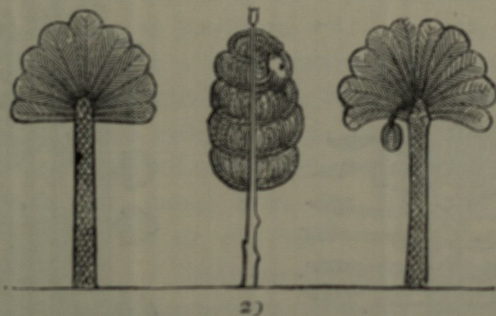
yields a more abundant intoxicating juice. Its fruit, also, would become the staff of life in the region of the Euphrates Valley, and hence would naturally be consecrated to Asshur, as the "Tree of Life." Later, the vine took its place in Asia Minor and Greece. As the "Tree of Life" is associated in the Bible with the Serpent and the Tree of Knowledge of Good and Evil, which brought death into the world, so, it is very suggestive to see in Rawlinson, vol. ii, p. 167, the date *Hom* arranged alternately with a serpent-encircled cypress [29], in the scene in which an Assyrian king is feasting his queen in a bower (*gloriette*) of the royal gardens.



28

In Egypt the knop and flower were represented by the date

palm and its fruit, by the lotus and its bud, and by the lotus flower and a bunch of grapes, or the lotus flower and a bull's head; sometimes the flower by the papyrus head. In Owen



Jones' *Grammar of Ornament*, Plate 4, Fig. 6, the ornament [30],



which looks like a lotus-headed form of some sort is proved to be a date, by the rippled mass of red and green hanging down one side of it, representing the ripe fructification of the date bursting from its spathe. That the ripple is taken from the zig-zag of the branching date stalks, any botanist will see. On the monuments, the Phœnician Venus Chiun [Amos v. 26] is shewn, presenting snakes to Remphan or Moloch, the Author of Death, and lotus flowers to Khem, the Author of Life, on whose altar we find the Tree of Life represented by a Loto-Papyrus-Palmheaded plant form, with a Cyprus form, evidently derived from the lotus bud, on either side, and guarded by the *cabiri*, which suggested to the Hebrews the Cherubim, placed at the East of the Garden of Eden, to keep the way of the Tree of Life, and to the Greeks "the dog" Cerberus, that guarded the entrance to Hades. The Tree of Life is represented throughout Greek and Roman and Italian and Renaissance art. It is still

represented on the commonest Spanish and Portuguese earthenware by a green tree that looks exactly like a Noah's ark tree; but it invariably springs from two curved horns, which betray the secret. In India the knop and flower change like the transformations of a dream. Indeed, in Hindu art imagination is let loose as in a dream. In the Amravati and Bharhut sculptures the transformations go on under your eye, and reveal the whole mystery. The cone is generally the lotus bud, and the elephant is never represented in carved stone without it in its trunk. Sometimes the cone of budding plantain fruit takes its place. The flower is generally the lotus represented *en silhouette*, like a fan, or full-faced; and sometimes the fan-like form of the Date *Hom* is given to the peacock's tail, and to the many-headed cobra; and not only these cobra heads, but the water-lily is represented in true honeysuckle form. The cone is also represented by the mango and jack. In short, anything full of the glory of life becomes the symbol of life. The peacock's tail, the lotus flower, the jack, the nutritious and uncloying plantain, the luscious golden mango, the thyrsus-like clusters of the flowers of the *cadamba*, and the sacred fig, throwing down rootlets from every branch, which take root again and spring up in forests round the parent stem, all are natural and obvious symbols of life. The melon-shaped finial on the pagodas of Indian temples, taken directly from a water vessel, is, I believe, derived from the unripe fruit of *Nymphaea rubra*. We have, however, to be on our watch for the vagaries of Hindu imagination. The entire leaf of the jack, *Artocarpus integrifolia*, is represented so swollen and bursting with life as to pass into the divided leaf of the Bread Fruit Tree, *Artocarpus incisa*. Again, we find the catkins of the jack, from which the long pendent ornaments worn by elephants in front of their ears are modelled, represented hanging out of the flowers, and from the fruit of the lotus, from the branches of the sacred fig, and about the *linga*, and *trisula*, which I believe to be the

combined *linga* and *yoni*. In the earlier sculptures a lotus plant [31] is represented issuing from the proboscis of an elephant, the stalk running along in an undulating line, between the curves of which the flower is seen alternately in full face and *en silhouette*, in the most superb style of conventional art. In

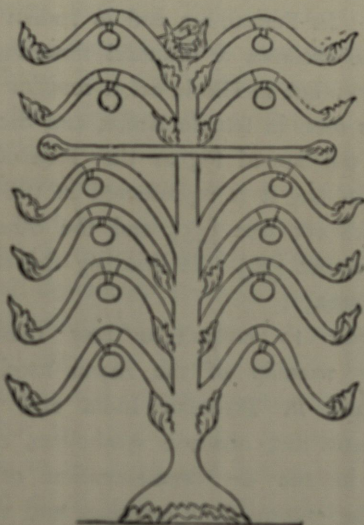


the Bharhut sculptures, a lotus springs in the same way from an elephant, and its flowers alternate with the jack and mango; and between each lotus "flower" and whatever fruit takes the place of the "knop" or cone, we have representations of the Buddhistic fables or *jatakas*; while the fruitful mystic lotus is represented pouring down all manner of good things, including jewelry in countless forms. In one place a woman in a tree, reminding one of the women in the Egyptian Tree of Life, is pouring water into a man's hands, from a veritable "teapot." In the Amravati and Takht-i-bhai sculptures, the lotus stalk is looped up in festoons by dwarfs, as we see similar festoons, in Roman architectural remains, held up by *genii*. The Takht-i-bhai sculptures were doubtless influenced by Greek examples, or were executed under Greek direction; but the intercourse with Assyria will really account for a good deal that looks like Greek inspiration in India, just as it is now evident that the ornamental details of Greek sculptures also were derived from Assyria. The "knotted rope" pattern may have been taken from the knots in the stalks of the cones issuing from the stem and head of the Date *Hom*, and the wedge pattern, alternate dark and light, from the conventional representation of the leaf scars on the stem of the Date *Hom*.

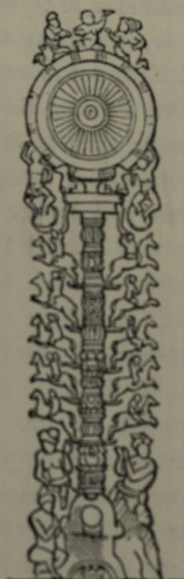
The tree-like figures [32, 33, 34] here illustrated, taken from Owen Jones and Mr. Fergusson and Mrs. Jameson, all recall



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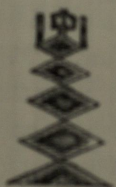


33



34

the *Asherah* or "Grove" of the Assyrians, particularly the



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37

medieval representation of the Cross, as the tree with twelve leaves for the healing of the nations.

Sometimes on Persian rugs the entire tree is represented, but generally it would be past all recognition but for smaller representations of it within the larger. In Yarkand carpets, however, it is seen filling the whole centre of the carpet, stark and stiff as if cut out in metal. In Persian art, and in Indian art derived from Persian, the tree becomes a beautiful flowering plant, or simple sprig of flowers; but in Hindu art it remains in its hard architectural form, as seen in temple lamps, and the models in brass and copper of the Sacred Fig as the Tree of Life. On an embroidered Indian bag it is represented in two forms, one like a notched Noah's ark tree [35], and the other branched like the temple candelabra [36]. In this bag the cone [37] is represented with the trees.

It is not difficult to conjecture how these religious symbols of the first worship of the Aryan race, afterwards darkened and polluted in Turanian India and Egypt and Assyria by a monstrous and obscene symbolism, came to be universally adopted in the art ornamentation of the East. They originated in the embroidered hangings and veils worked by women for the temples, which they embroidered with the representation of the symbol of the deity worshipped.

The women "who wove hangings for the grove," or *Asherah*, are alluded to in 2 Kings xxiii 7. They probably embroidered on cut patterns, and worked the larger patterns in *appliqué* into their work; and they cut the patterns by folding the cloth double, so as by one undulating or zig-zag cut to get a two-sided symmetrical pattern. Nor is this entirely conjecture. This method is everywhere practised among the artistic peasantry of Europe. I have a number of such patterns, which I once saw a French peasant boy cutting out in paper and throwing up into the wanton wind to while away the time. It happens that they are all of trees, cypresses and other trees, with the cross introduced in the most strange conventional manner about them, trees, in fact, of life and death. The method of cutting out patterns in

this way tends to perpetuate a symmetrical and rectangular representation of ornament. The Noah's ark-like tree, on the Pindari bag, is certainly derived from a bit of paper or cloth folded and cut crossways and then notched. Be this as it may, the knop and flower pattern, and the Tree of Life pattern pervade all decorative art, and by direct derivation from the Assyrian lotus and lotus bud, and *Asherah* cone, but no longer as symbols. This absence of symbolism is the weakness of modern European decoration, as indeed it was of Grecian; and yet what conventional form is more beautiful than the French *Fleur-de-lis*, more beautiful and worshipful than the Tudor rose, or than such heraldic symbols as the cross crosslet; and the most natural decoration for wall papers, curtains, and book lining papers, would be, for people who could afford it, to use family arms, alone, or in combination with national symbols, and conventionalised representations of national flowers and animals. But no symbols can approach in beauty of form and meaning to the knop and flower, and the *Hom* of Assyria and, purified of all local taint of Asshur, Ashtoreth or Astarte, they belong to all the Aryan races in the old world and the new. They are the most ancient badges of the Aryan race, but in India their employment in ornamentation, under the influence of the Puranic mythology, was for ages subordinated to that of the monstrous idol [*swami*] shapes of the Dravidian south; and it was by the Persianised or Arianised Arabs, Afghans, and Mongols [Turkomans], that their use was reintroduced as predominant forms in Indian decoration, wherever, throughout Hindustan and the Dakhan, Mahommedanism prevails. They are seen figured everywhere in Oriental art, and we cannot take up a talisman of Egypt, a Syrian silk, an alabastron of Persian perfumes, or a Persian illuminated MS., or carpet, a Cashmere shawl, an Indian jewel, or *Kinab*, any of the great store of these splendid and precious stuffs, and arms, and vessels of wrought gold and silver, herein described, on

which we do not find them represented, as the acknowledgment in their original use at least, of the Divine Author and Finisher of every good and perfect work ; under forms, taken from the most majestic of trees and the most graceful of flowers, and which express more simply, directly, and fully than can any form of words, the wisdom and beneficence of the Creator and the gladness and praise of men. Thus Indian Art, in every decorative detail, Aryan or Turanian, bears witness to the universal conviction that the character of man's being and destiny is supernatural ; and that human duty, and all that gives to daily intercourse the charm of art and grace of culture, possess their reality and true meaning only in the purposes of a life beyond life.

THE END.

